



OmniVue®
Version 3.1

Revision History

Date	Version	Description
07-Nov-2008	3.1	New Version

Copyrights

OmniVue® is a trademark of Genesis Digital Imaging, Inc.
All products and company name mentioned herein should be considered registered trademarks or trademarks of their respective companies. All rights reserved.
The information in this manual is subject to change without notice.
© 2008 Genesis Digital Imaging, Inc.

Table of Content

INTRODUCTION.....	7
WELCOME TO OMNIVUE.....	8
KEY FEATURES.....	8
RECOMMENDED HARDWARE REQUIREMENTS.....	10
HOW TO INSTALL OMNIVUE	11
HOW TO USE OMNIVUE	17
LOGIN PROCEDURE	18
OMNIVUE SOFTWARE APPLICATION OVERVIEW.....	19
1. Worklist Window	19
A. OmniVue worklist window features the following 5 Tabs	19
B. Worklist Database.....	20
2. Display Window.....	21
WORKLIST DETAILS	23
1. Exam List	23
1.1 Information Sections.....	23
1.2 Function Buttons.....	24
1. Merge Patient.....	25
2. Split Exam	27
3. Merge Exam	29
4. Split Series	31
5. Merge Series	34
6. Delete Exam.....	36
7. DICOM Send	37
8. Edit Config.....	41
9. Open Exam.....	44
10. Reset Search.....	44
11. Search	45
12. Report.....	45
2. Q&R (Query & Retrieve).....	47
3. DICOM DIR	51
4. CD/DVD Creator	52
1. Client CD burning	52
2. Archive/Backup to DVD/CD	56
5. Mass Export	61
DISPLAY WINDOW DETAILS	64
1. Menu List.....	65
1.1 File	65
1. Open Worklist.....	65
2. Save	65
3. Close	66

4.	Next Exam	66
5.	Reserve Exam	66
6.	Close All	66
7.	Export	66
8.	Import	66
9.	Batch Import	68
10.	Send DICOM File	70
11.	Send To Folder	70
12.	Send To Email	74
13.	Open DICOM File	76
14.	Open Non-DICOM File	76
15.	Twain Select source	76
16.	Twain Acquire Multi	76
17.	Print	76
18.	Print Setup	79
19.	Logoff	79
20.	Exit	79
1.2	Edit	79
1.	Delete Selected Images	80
2.	Delete Unselected Images	80
3.	Undo Deleted Images	80
4.	Hide Selected Images	80
5.	Show Hidden Images	80
6.	Copy to Clipboard	80
7.	Overlay Delete All	81
8.	Select All	81
9.	Deselect All	81
1.3	View	82
1.	Auto Close	82
2.	Refresh	83
3.	Chest CT View	84
4.	Stack/Tile View (Cine)	85
5.	DICOM Overlay Show/Hide	86
6.	ROI/Annotation Show/Hide	86
7.	Ruler Show/Hide	87
8.	Set Scout Image	87
9.	Add Scout Image	87
10.	Scout On/Off button	89
11.	Popup Scout Image	89
12.	DICOM Header	89
13.	Floating Exam List	90
14.	Toolbar	90
15.	Caption	90
16.	Status Bar	91
17.	Full Screen	91
18.	Reset Window Position	91
1.4	Image Process	92
1.	Arrow	93
2.	MouseStack	93
3.	Zoom In/Out	93
4.	Magnify Glass	93
5.	Panning	94
6.	Mask Enabled/Disabled	94
7.	Mask Settings	95
8.	Window Level	95
9.	All Window Level	95

10. Auto Leveling.....	96
11. Inverse.....	96
12. Display Original	96
13. Display All Original	97
14. Manual Real Size Setting	97
15. Manual Real Size Mode	97
16. Display Manual Real Size.....	97
17. Flip Horizontal.....	97
18. Flip Vertical.....	98
19. Rotate CW.....	98
20. Rotate CCW	98
21. Arbitrary Rotate	99
22. Rectangle ROI.....	99
23. Circle ROI Image.....	100
1.5 Annotation	100
1. ROI	101
2. Measure	102
3. Compare Measure.....	103
4. Angle	103
5. Annotation	104
6. Arrow Line	105
7. Freehand Line	105
8. Pseudo Color.....	105
9. Picking.....	106
10. Profile	106
11. Pixel View.....	106
12. Chest CT Ratio (Heart size of CR)	107
1.6 Tool.....	107
1. Report.....	107
2. Comments	107
3. Merge Patient.....	109
4. Merge Exam	109
5. Merge to One Series	109
6. Rearrange Image.....	109
7. Rearrange Image Manually	109
8. Select Spine Image	111
9. Image Stitching.....	111
10. Select Source/Destination Image	113
11. Image Subtraction	113
12. Image Addition.....	114
13. Select Images to Merge Horizontally	114
14. Merge Selected Images Horizontally	114
1.7 W/L Preset.....	115
1.8 LUT Preset	116
1. How to Adjust the LUT Graph	116
2. How to Preset Lookup Table.....	117
3. Lookup Table Tools.....	118
1.9 Sharpen Preset.....	118
1.10 Option.....	119
1 Preferences	119
2 Conference Folder.....	134
3 Toolbar Configuration	134
4 DICOM Overlay Configuration	135

5	Network	137
6	About OmniVue	138
1.11	Hanging Preset	138
1.	1 Series	138
2.	2 Series	139
3.	2 Exams	139
1.12	Macro	139
1.	Macro	139
2.	Record Macro	143
TROUBLE SHOOTING		144
1.	Slow Viewing	145
2.	Image Not Found	145
3.	Response Time	146
4.	Login Problems	146
5.	Local DB backup	147
6.	Directory and Files	147



Chapter Introduction

- Welcome to OmniVue®
- Key Features
- Hardware Requirements

Welcome to OmniVue®

OmniVue® is a full diagnostic DICOM viewing software. It enables Radiologists to do primary diagnostic interpretations (Diagnostic) and Physicians to practice patient care (Clinical). Physicians can utilize the software for teaching, research and conference activities as well as Teleradiology and Telepathology. OmniVue® provides a non-linear lookup table for the outstanding image quality. It also allows various image processing and database management. Users can also directly access OmniArchive as a client to retrieve the image data.

OmniVue® is DICOM compatible including DICOM Storage, DICOM Query and Retrieve and DICOM Print for easy networking with third party PACS or modalities. OmniVue® provides means for efficiently managing patient and medical data.

Key Features

Image Display

- Supports 1,2,3,5 MP Resolutions
- Optional Dual Monitor
- Separate Worklist Display
- Hanging Display Options 20/1
- Hanging Display Presets
- Multiple Exam Display
- Thumbnail Display
- Chest CT View
- Stack/Tile View
- Scout View
- Synchronized CT, MR viewing
- Cine View for Ultrasound, CT & MR
- Pixel View
- Customizable Toolbar
- Font Management
- Orientation*

Communication

- DICOM 3.0 Storage SCP
- DICOM 3.0 Storage SCU (Multiple Destinations)
- Multiple Modality Input (255 concurrent DICOM connections)
- DICOM Query & Retrieve
- DICOM DIR
- Manual Send
- Supports most DICOM data types
- E-Mail in 6 formats: DCM, JPEG, TIFF, BMP, J2K, PDF*

Print

- DICOM, Paper
- True Size

File Management

- Import DICOM Files

- Import Non-DICOM Files
- DICOM DIR
- Batch Import
- Import/Export DICOM
- Import Export JPG BMP TIFF PDF*
- Convert Non-DICOM and non-DICOM Images
- Convert Multi-frame images into AVI
- Worklist Search
- Series Merge/Split
- Exam Merge/Split
- Multiple Patients CD/DVD burning with auto-run mini viewer
- DVD Backup with DIR
- E-mail Images
- Conference Folder
- Mass Export to External Destination*

Image Processing

- W/L, W/L All, Auto W/L
- W/L Presets
- LUT Presets
- Image Sharpening Presets
- Flip, Rotate, Arbitrary Rotate
- DR Masking*
- Zoom, Pan
- Magnifying Glass (W/L, Zoom, Adjust Size)
- Inversion
- Macro
- Copy to Clipboard

Annotation

- Measure
- Angle
- Cobb Angle
- ROI with W/L
- Arrow Line
- Pseudo Color
- Picking
- Profile
- Reports
- Comments
- Add User Annotation
- Interface with voice recognition system

DICOM Information

- Overlay Option
- View DICOM header Information
- Query & Retrieve

Tools

- Spine Image Stitching (CR, DR*)
- Rearrange Imaging
- Twain Driver
- Automatic Updates (Via Web)

Optional Capture Solutions

- Kodak Point-of-Care*
- Orex ACL*
- Vidar Digitizer*
- Modality Worklist*

Additional Features:

- Supports Windows XP Professional & Vista*
- Seamless integration to OmniArchive

Note: * indicates new features

Recommended Hardware Requirements

1. CPU: Dual core processor or better, Intel or AMD.
2. Memory: 2 GB or higher.
3. HDD: 80G HDD or higher.
4. Ethernet network card: 100/1000Mb NIC.
5. OS: Window XP Pro SP3 or Vista 32-bit SP1.
6. Always-on internet connection (For automatic updates and remote desktop technical support).



Chapter

How to Install OmniVue®

- Installation of OmniVue®

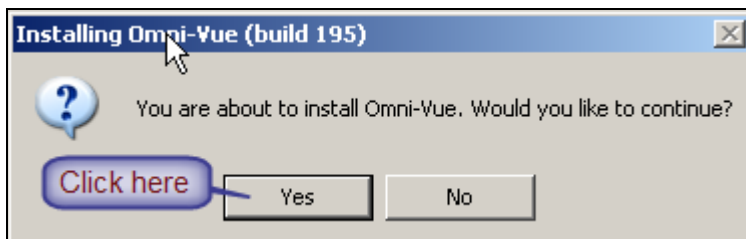
INSTALLATION OF OMNIVUE®

Note: For Installation from web download, skip to step # 4

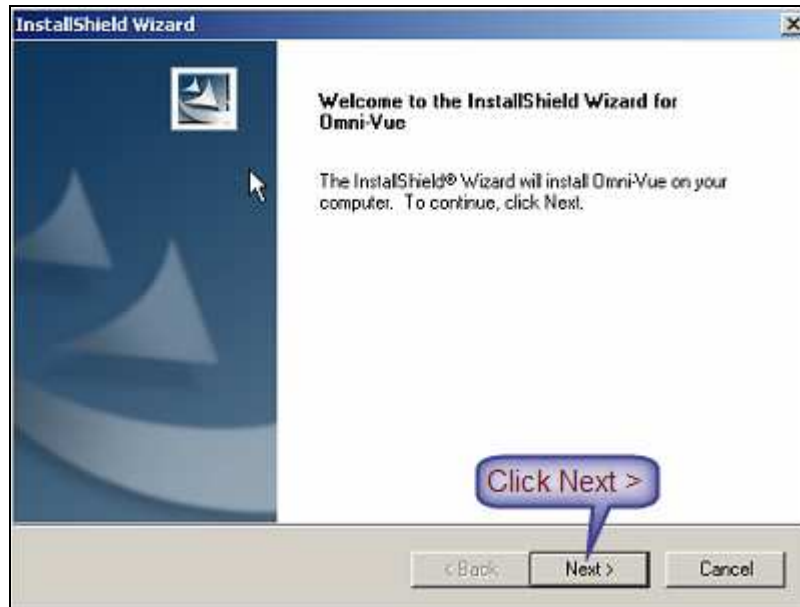
1. Insert **OMNIVUE® Viewer Installation CD** into CD-ROM (Should open the following layer)
2. Click on the Second Option: **Install OmniVueUSB Locked Full Version**



3. Click **Yes** to continue



- Click **Yes** to continue



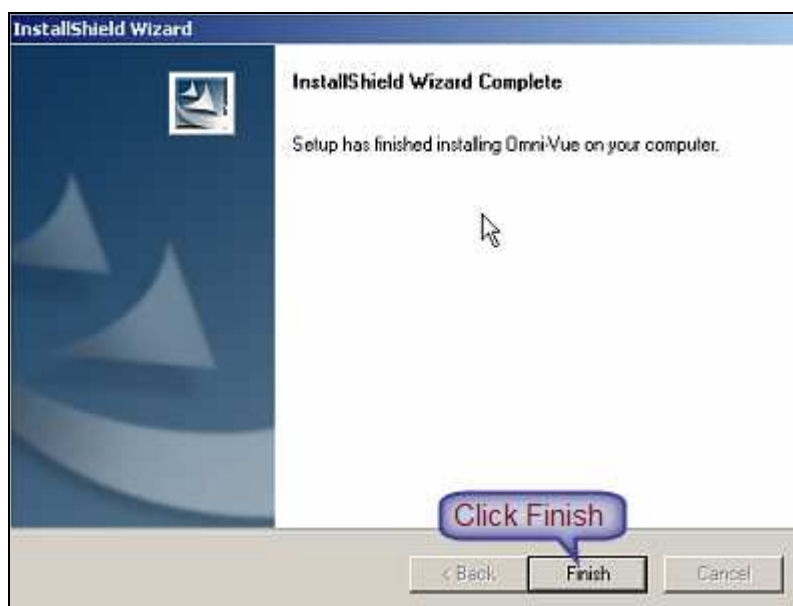
- Click **Yes** to accept terms of License Agreement and continue



6. Click **Next** to continue



7. Click **Finish**. This will close installation program and launch HASP HL Device Driver Installation Wizard



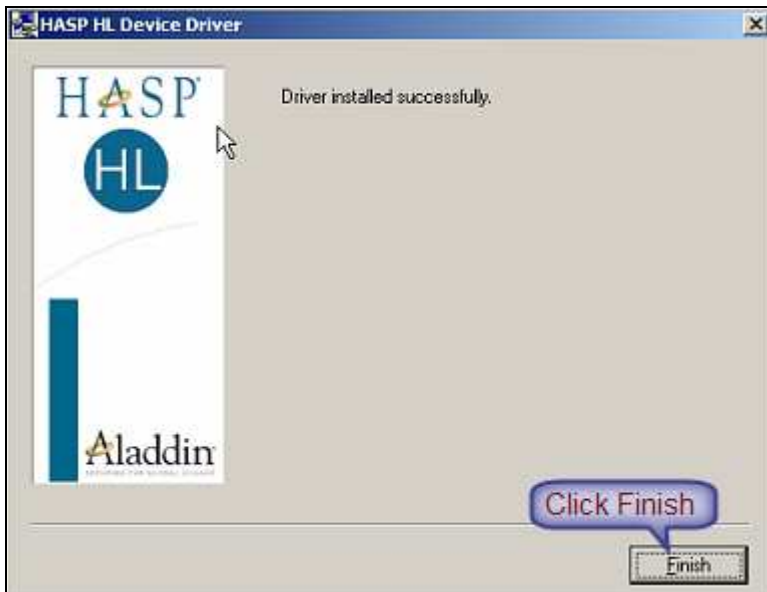
8. Click **Next** to continue Installation



9. Select **"I accept the license agreement"** and click **Install** to continue



10. Click **Finish** to complete installation



11. The following OmniVue® Icon is placed on the Desktop:



Note: OmniVue® HASP dongle should be inserted into USB Port in order to launch software





Chapter

How to use OmniVue®

- Login Procedure
- Update Institute Name
- OmniVue® Software Application Overview
- Worklist Details
- Display Window Details

Login Procedure

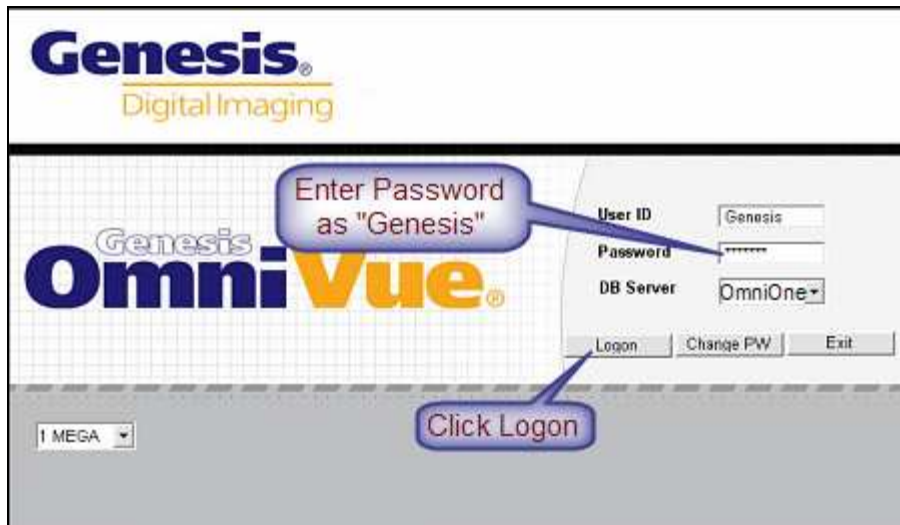
1. OmniVue® HASP dongle should be inserted into USB Port in order to launch software



2. Double-click on **OmniVue Icon** on the Desktop



3. Enter Password: **genesis**
4. Click **Logon**



- If you have Windows Firewall enabled, you will be prompted to unblock program. Click **Unblock**.



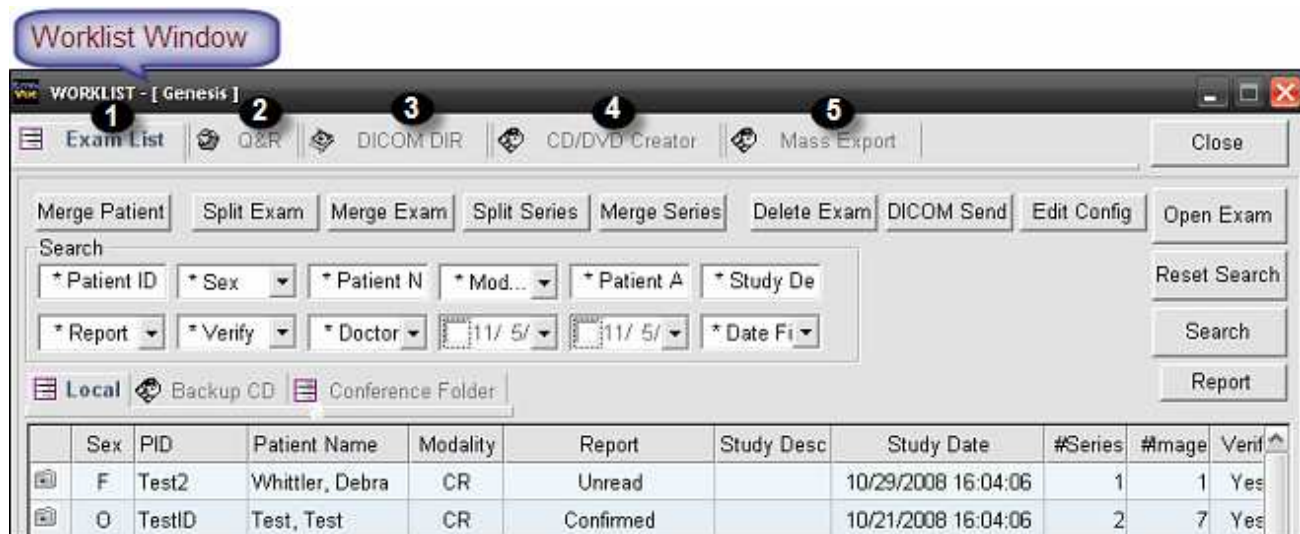
OmniVue® Software Application Overview

OmniVue® software application consists of the following two windows. (The two windows can be displayed on 2 separate monitors when 2 monitors are present)

- Worklist Window
- Display Window

1. Worklist Window

OmniVue software application launches with the worklist window. This window displays the exam list as the default view.



A. OmniVue worklist window features the following 5 Tabs

1) Exam List (default)

Exam List displays exams that are accepted after acquisition that contain exam details with patient information.

2) Q & R

Q&R (Query & Retrieve) tab is used to query list of images and retrieve them from OmniArchive or other third party PACS devices which support DICOM 3.0 Standards.

3) DICOM DIR

DICOM DIR tab is used to upload DICOMDIR files from CD/DVD or External-Drive.

4) CD/DVD Creator

This feature copies patient exam/s on CD or DVD with a mini-viewer (Simple Viewer) which enables users to navigate through the Exam similar to OmniVue when the CD or DVD is used.

5) Mass Export

This feature enables user to move/back-up patient data from local disk to external drive.

B. Worklist Database

OmniVue worklist has a local database. Users can create multiple conference folders with their own independent database.

	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image	Verif
	F	Test2	Whittler, Debra	CR	Unread		10/29/2008 16:04:06	1	1	Yes
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	2	7	Yes

2. Display Window

Display window is for viewing, annotating & modifying images. Display window has a non-linear lookup table to maximize image quality and features other image processing tools.



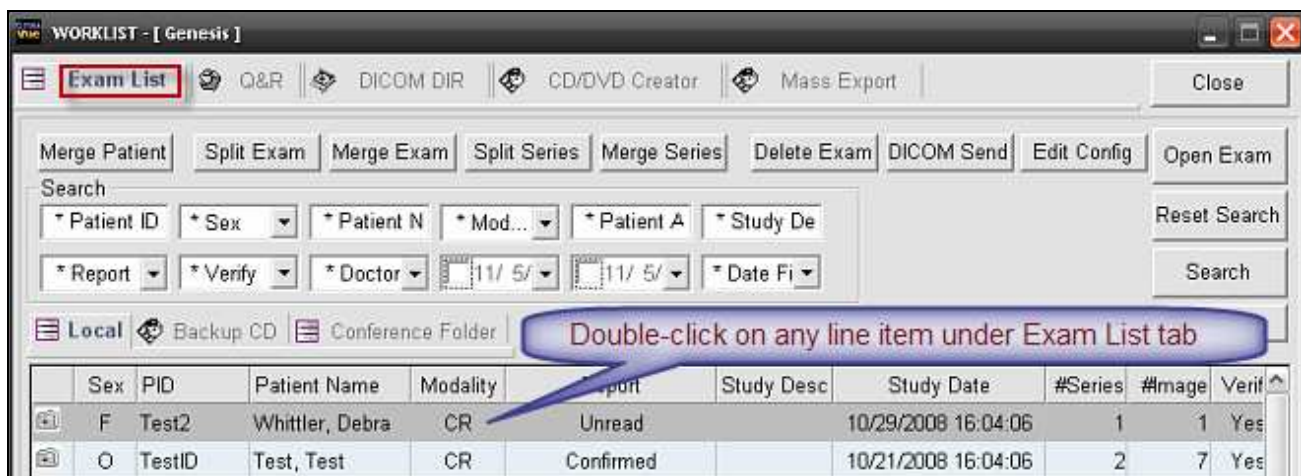
Navigation to the Display Window

Listed below are different ways to navigate to Display Window from Worklist Window:

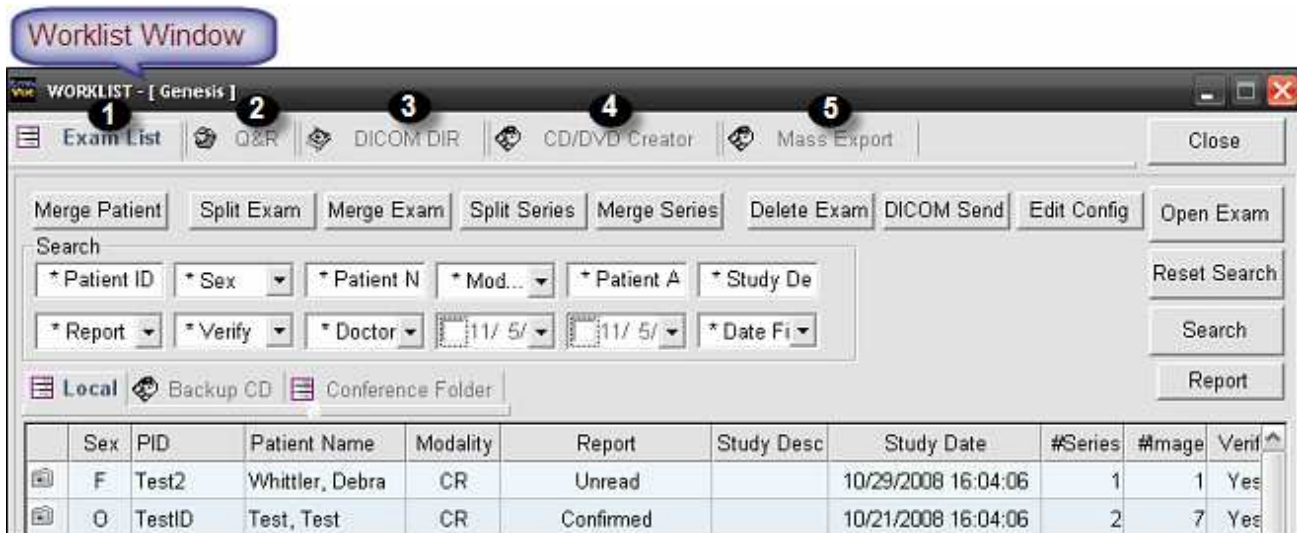
1. Click **Close** from any Tab in Worklist Window



2. Exam List Tab: Double-Click on any line item to **View** Exam images on Display Window



Worklist Details



1. Exam List

Exam List displays all exams that have been acquired and accepted

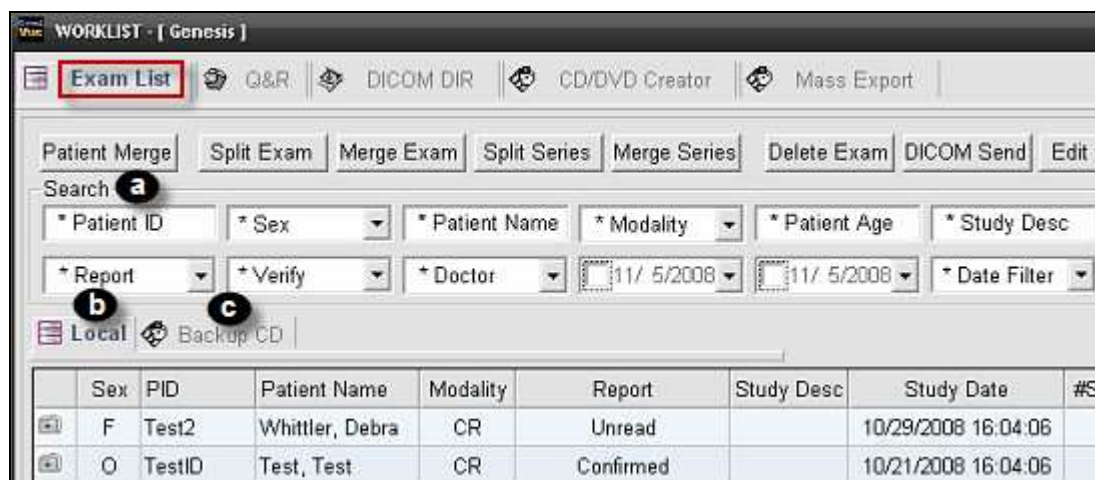
1.1 Information Sections

Exam List tab has following Sections:

Search

Local

Backup CD



a) Search

This feature enables users to search exams with one or multiple search criteria:

Patient ID, Sex, Patient Name, Modality, Patient Age, Study Description, Report, Verify, Doctor, Exam Start Date, Exam End date & Date Filter

The search form contains the following fields:

- * Patient ID
- * Sex
- * Patient Name
- * Modality
- * Patient Age
- * Study Desc
- * Report
- * Verify
- * Doctor
- 10/28/2008
- 10/28/2008
- * Date Filter

b) Local

Displays complete list of exams on your Local database

c) Backup CD

Displays Exams Copied/Moved to a CD or DVD

1.2 Function Buttons

Exam List tab has following function buttons:

Merge Patient, Split Exam, Merge Exam, Split Series, Merge Series, Delete Exam, DICOM Send, Edit Config, Open Exam, Reset Search, Search & Report. Most of these functions can also be performed by Right-Clicking on the Line Item.

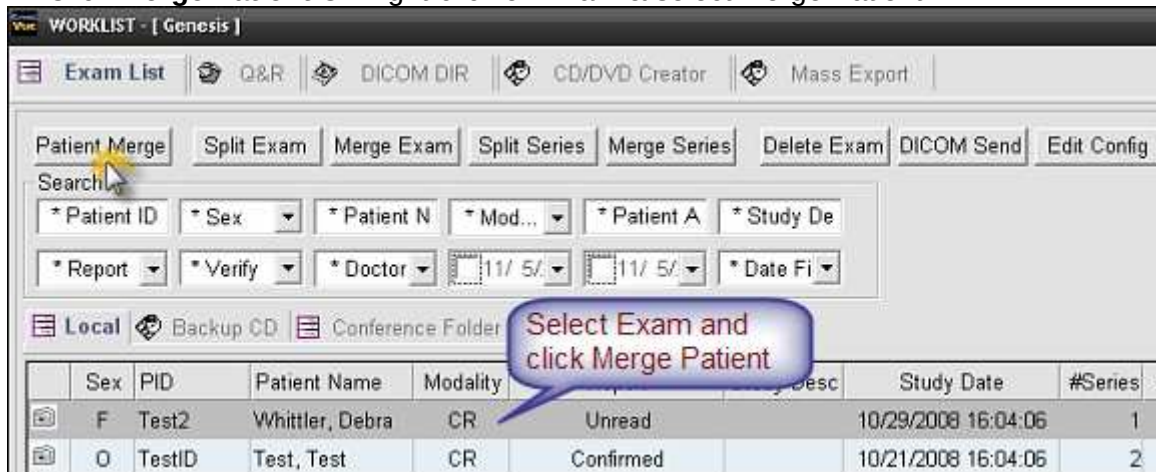
The screenshot shows the WORKLIST - [Genesis] window with the Exam List tab selected. The interface includes a toolbar with buttons for Merge Patient, Split Exam, Merge Exam, Split Series, Merge Series, Delete Exam, DICOM Send, Edit Config, and Open Exam. Below the toolbar is a search section with fields for Patient ID, Sex, Patient Name, Modality, Patient Age, Study Description, Report, Verify, Doctor, Exam Start Date, Exam End Date, and Date Filter. To the right of the search fields are buttons for Reset Search, Search, and Report. At the bottom, there is a table with columns for Sex, PID, Patient Name, Modality, Report, Study Desc, Study Date, #Series, #Image, and Verify. The table contains two rows of data.

	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image	Verify
	F	Test2	Whittler, Debra	CR	Unread		10/29/2008 16:04:06	1	1	Yes
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	2	7	Yes

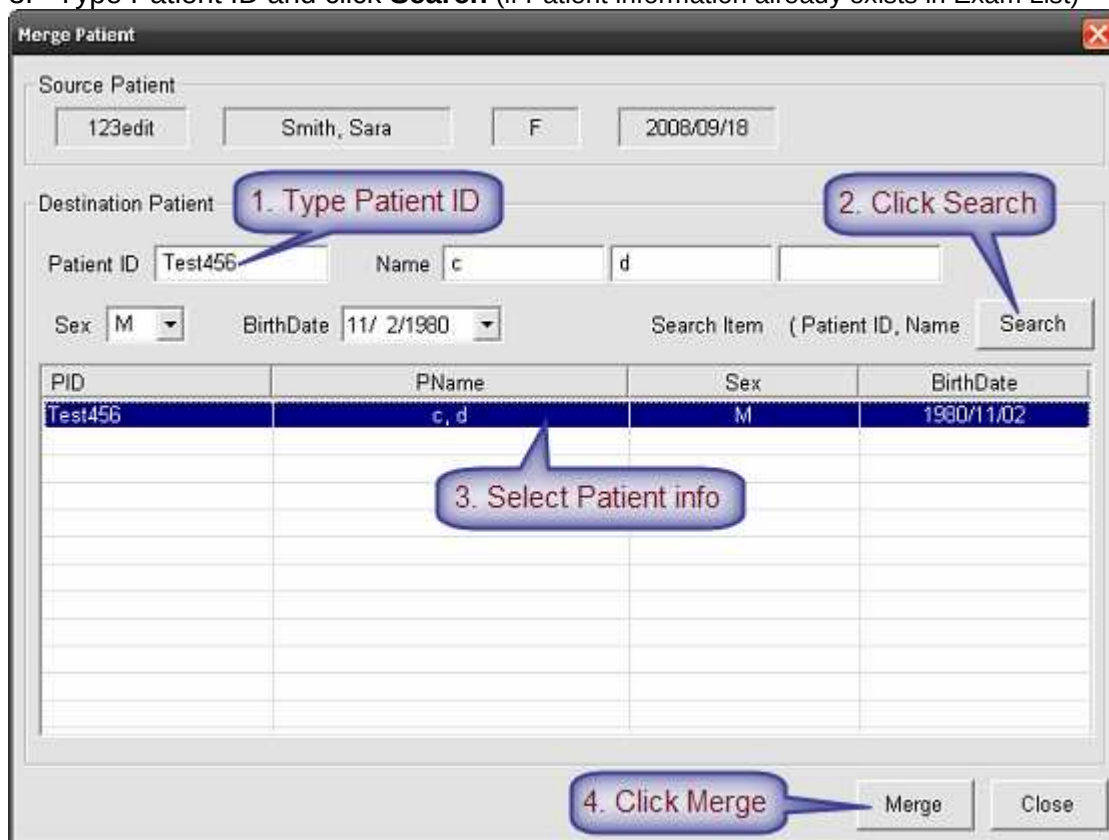
1. Merge Patient

Merge Patient button is used to change the following patient information on exam:
Patient ID / Name / Sex / Date of Birth

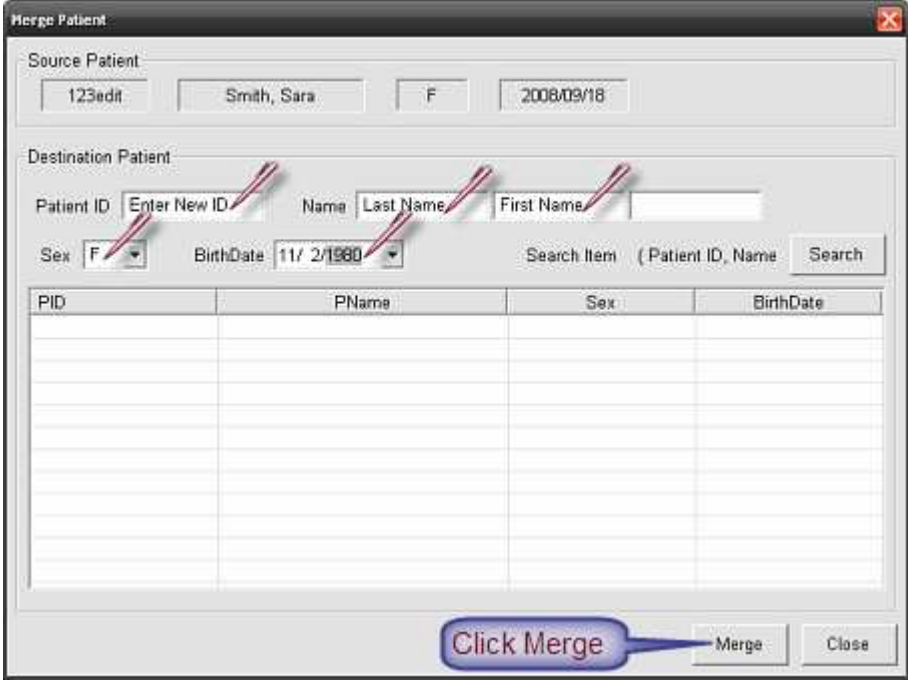
1. Under Exam List Tab, Left-click once on Exam that needs to be edited
2. Click **Merge Patient** OR right-click on Exam & select Merge Patient



3. Type Patient ID and click **Search** (if Patient information already exists in Exam List)

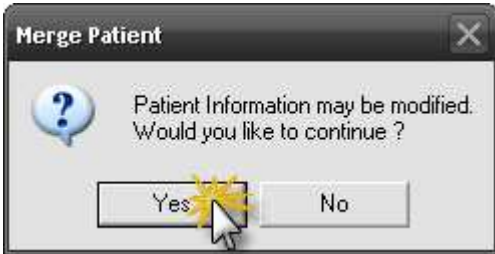


4. Type new patient ID, last name, first name, select sex and birth date & click **Merge**
(To add new patient information)



The 'Merge Patient' dialog box is shown. It has two sections: 'Source Patient' and 'Destination Patient'. The 'Source Patient' section contains fields for Patient ID (123edit), Name (Smith, Sara), Sex (F), and BirthDate (2008/03/18). The 'Destination Patient' section contains fields for Patient ID (Enter New ID), Name (Last Name, First Name), Sex (F), and BirthDate (11/ 2/1980). There is a 'Search Item' dropdown set to '(Patient ID, Name)' and a 'Search' button. Below these fields is a table with columns: PID, PName, Sex, and BirthDate. At the bottom right, there is a 'Merge' button and a 'Close' button. A blue callout bubble with the text 'Click Merge' points to the 'Merge' button.

5. User will be prompted with information that exam may be modified, click **Yes** to continue & then click **OK** on pop up that says "Successfully merged patients"



The 'Merge Patient' dialog box is shown with a question mark icon. The text reads: 'Patient Information may be modified. Would you like to continue?'. There are two buttons: 'Yes' and 'No'. A yellow starburst icon is over the 'Yes' button.



The 'Merge Patient' dialog box is shown with an information icon. The text reads: 'Successfully merged patients'. There is one button: 'OK'. A yellow starburst icon is over the 'OK' button.

6. Patient information for the selected exam will be changed

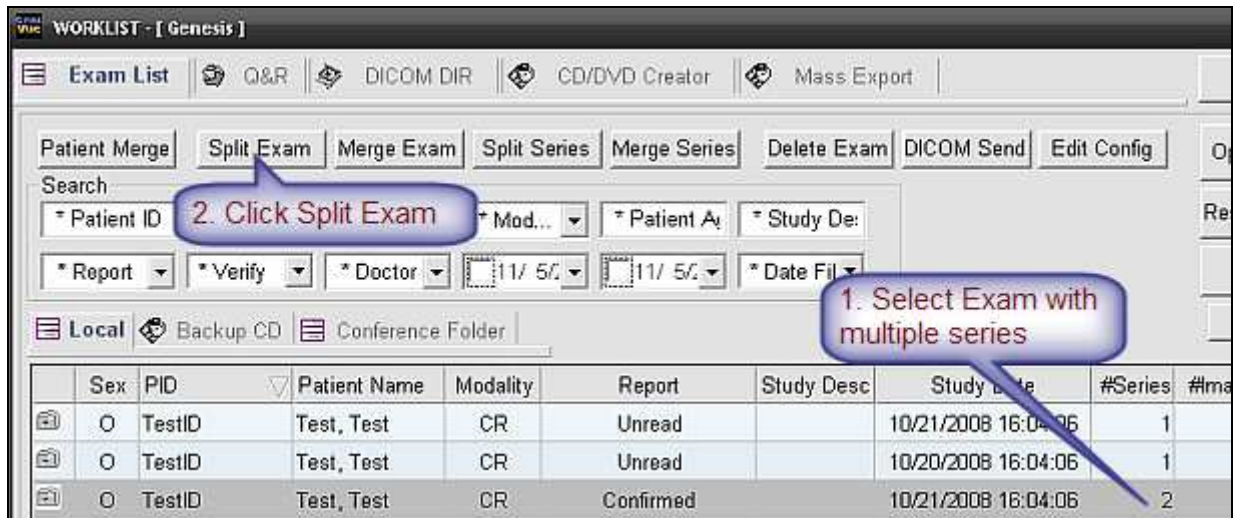


The 'WORKLIST - [Genesis]' dialog box is shown. It has a menu bar with 'Exam List', 'Q&R', 'DICOM DIR', 'CD/DVD Creator', and 'Mas'. Below the menu bar are buttons: 'Patient Merge', 'Split Exam', 'Merge Exam', 'Split Series', 'Merge Series', and 'Delete'. There is a 'Search' section with fields for '* Patient ID', '* Sex', '* Patient Name', '* Modality', '* Report', '* Verify', and '* Doctor'. Below the search fields are buttons: 'Local', 'Backup CD', and 'Conference Folder'. At the bottom, there is a table with columns: Sex, PID, Patient Name, Modality, and Report. The first row of the table has the following data: F, Enter New PID, Last Name, First Name, CR, and Unread. A red arrow points to the 'Enter New PID' cell.

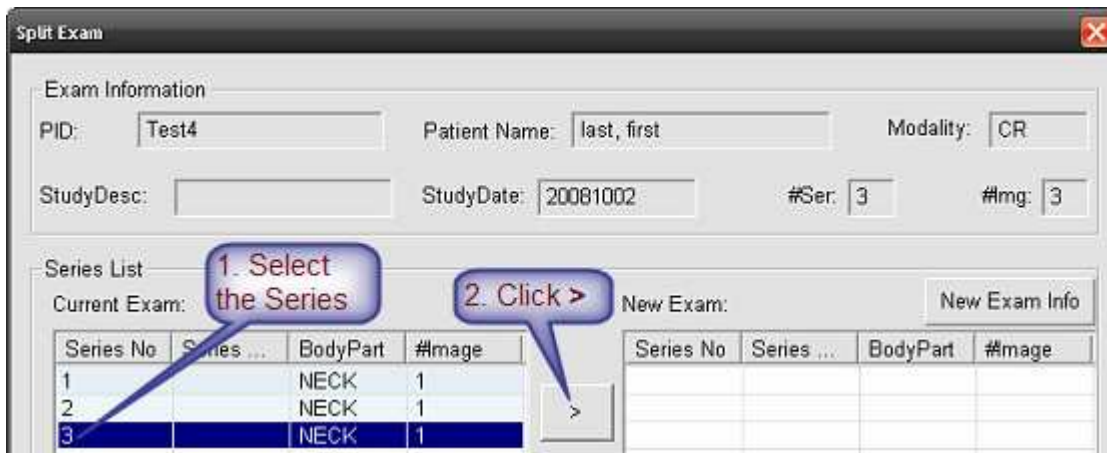
2. Split Exam

Split Exam button is used to Split series to other exams.

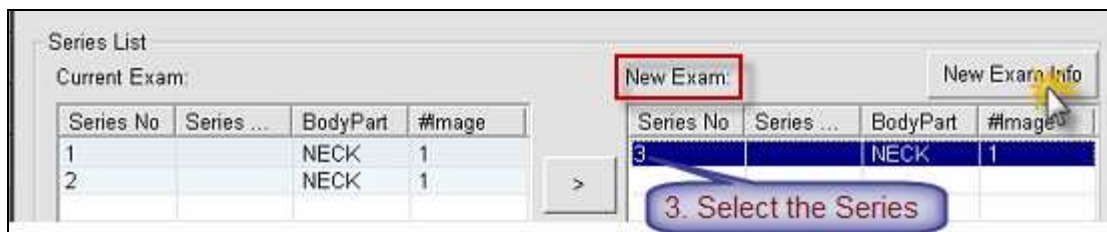
1. Under Exam List Tab, Left-click once on Exam that has multiple Series



2. On 'Split Exam' window, select series that has to be split as a separate Exam
3. Click >



4. Select series moved under New Exam Section
5. Click **New Exam Info**



6. Enter information in the required fields and click **OK**

DICOM Information

Patient Information

* Patient ID: Test4 * Sex: M

* Last Name: last * DOB (MM/DD/YYYY): 9/29/2008

* First Name: first

Middle Name:

Study Information

Study ID: Accession Number:

Study Description:

Clinical History:

Contrast / Bolus Agent:

Referring Physician:

Last Name: First Name: Middle Name:

Selected Referring Physician Name:

Series Information

Series Description:

OK Cancel

7. Click **Split Exam**

Split Exam

Exam Information

PID: Test4 Patient Name: last, first Modality: CR

StudyDesc: StudyDate: 20081003 #Ser: 3 #img: 3

Series List

Current Exam:

Series No	Series ...	BodyPart	#image
1		NECK	1
2		NECK	1

New Exam:

Series No	Series ...	BodyPart	#image
3		NECK	1

> >> < <<

Split Exam Close

- User will be prompted with information that exam may be modified, click **Yes** to continue & then click **OK** on Split Done pop up



- Series will split and display as 2 separate exams

Local Backup CD Conference Folder

	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image
	F	Enter New PID		CR	Unread		10/29/2008 16:04:06	1	1
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	3
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	4
	O	TestID	Test, Test	CR	Unread		10/21/2008 16:04:06	1	3

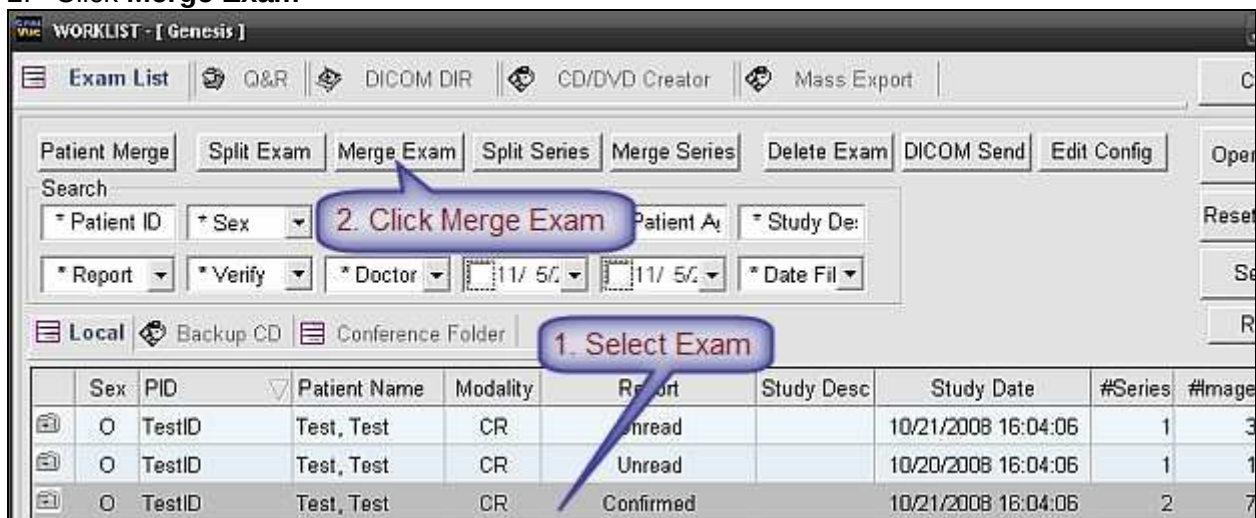
3. Merge Exam

Merge Exam button is used to merge an exam to another exam.

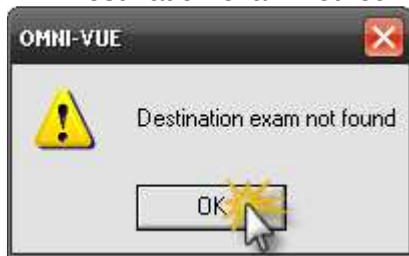
- Under Exam List Tab, Left-click once on Exam that has to be merged with another exam

Note: 2 Exams with same patient ID can also be merged

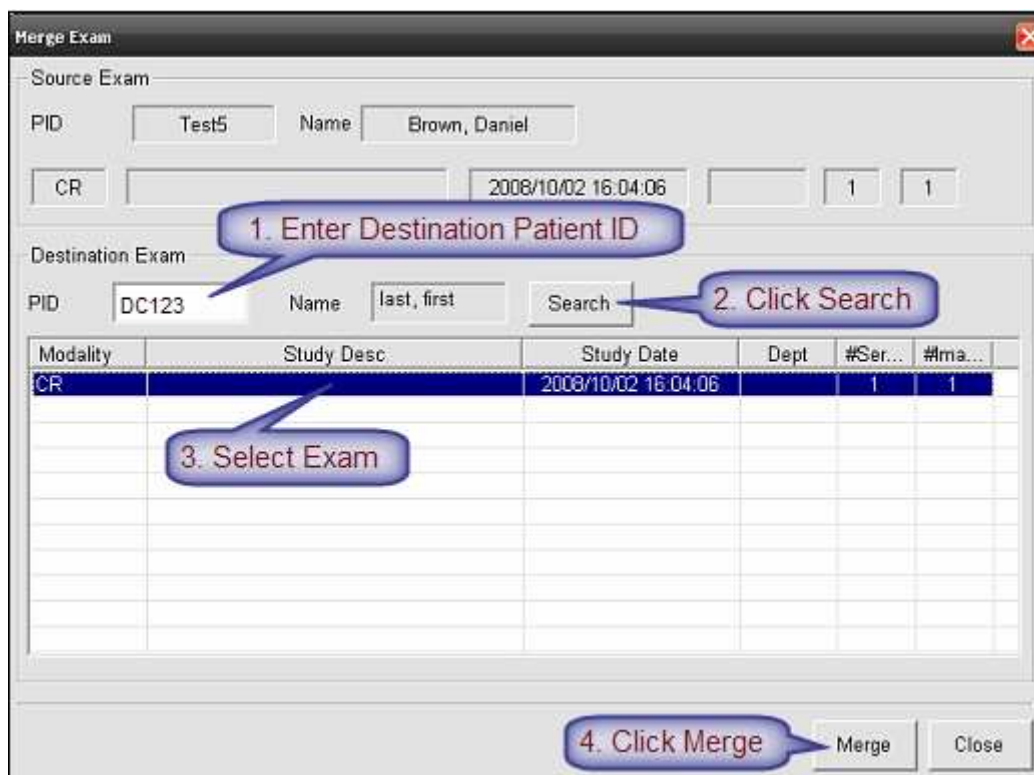
- Click **Merge Exam**



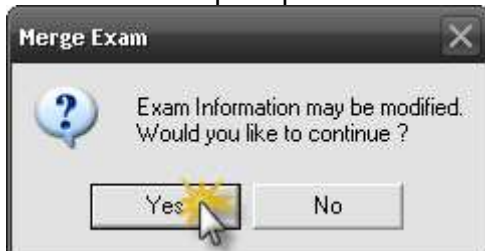
3. If Exam List tab has only one line item, user will be prompted with following message
“Destination exam not found”, click **OK**



4. On 'Merge Exam' window, enter Destination **Patient ID** & click **Search**
5. Left-click once on Exam from the search results
6. Click **Merge**



7. User will be prompted with information that exam may be modified, click **Yes** to continue



8. Exam will be merged to the Destination Patient ID

Local Backup CD Conference Folder

	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image
	F	DC123	Testing	CR	Unread	Image Stit...	09/27/2001 16:04:06	2	2
	F	Enter New PID		CR	Unread		10/29/2008 16:04:06	1	1

4. Split Series

Split Series button is used to split an image to other series.

- Under exam list tab, left-click once on exam that has multiple series

Exam List

Q&R

DICOM DIR

CD/DVD Creator

Mass Export

Patient Merge

Split Exam

Merge Exam

Split Series

Merge Series

Delete Exam

DICOM Send

Edit Config

Search

* Patient ID

* Sex

* Patient Name

* Study Desc

* Report

* Verify

* Doctor

* Date Filter

Local

Backup CD

Conference Folder

2. Click Split Series

1. Select Exam with multiple images

	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image
	F	Enter New PID		CR	Unread		10/29/2008 16:04:06	1	1
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	3
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	4

- On 'Split Exam' window, select the series under Series List
- Select Image that has to be moved to another Series
- Click >

Split Series

Exam Information

PID: Test1 Patient Name: ABC, DEF Modality: CR

StudyDesc: StudyDate: 20081003 #Ser: 1 #img: 2

Series List

Series No	Series Desc	BodyPart	#Image
1		NECK	2

Image List

Current Series:

Image	Image Path	File Name
1	Test1\20081003\CR\	CR155556
2	Test1\20081003\CR\	CR155556

New Series:

Image	Image Path	File Name
-------	------------	-----------

New Series Info

1. Select the Series

2. Select the Image that has to be moved to a new series

3. Click >

5. Select image moved under New Series section
6. Click **New Series Info**

Split Series

Exam Information

PID: Test1 Patient Name: ABC, DEF Modality: CR

StudyDesc: StudyDate: 20081003 #Ser: 1 #img: 2

Series List

Series No	Series Desc	BodyPart	#image
1		NECK	2

Image List

Current Series:

Imag...	Image Path	File Name
1	Test1\20081003\CR\	CR155556...

New Series:

Imag...	Image Path	File Name
2	Test1\20081003\CR\	CR155556...

New Series Info

4. Select the Image

7. Enter Series Description and click **OK**

DICOM Information

Patient Information

*Patient ID: Test1 *Sex: M

*Last Name: ABC *DOB: 2/11/1980 (MM/DD/YYYY)

*First Name: DEF

Middle Name:

Study Information

Study ID: Accession Number: 2008100315551335

Study Description:

Clinical History:

Contrast / Bolus Agent:

Referring Physician

Last Name: First Name: Middle Name:

Select Referring Physician Name:

Series Information

Series Description:

OK Cancel

8. Click **Split Series**

Split Series

Exam Information

PID: Test1 Patient Name: ABC, DEF Modality: CR

StudyDesc: StudyDate: 20081003 #Ser: 1 #img: 2

Series List

Series No	Series Desc	BodyPart	#Image
1		NECK	2

Image List

Current Series:

Image...	Image Path	File Name
1	Test1\20081003\CR\	CR155556...

New Series:

Image...	Image Path	File Name
2	Test1\20081003\CR\	CR155556...

Buttons: Split Series (highlighted), Close

9. User will be prompted with information that exam may be modified, click **Yes** to continue & then click **OK** on Split Done pop up



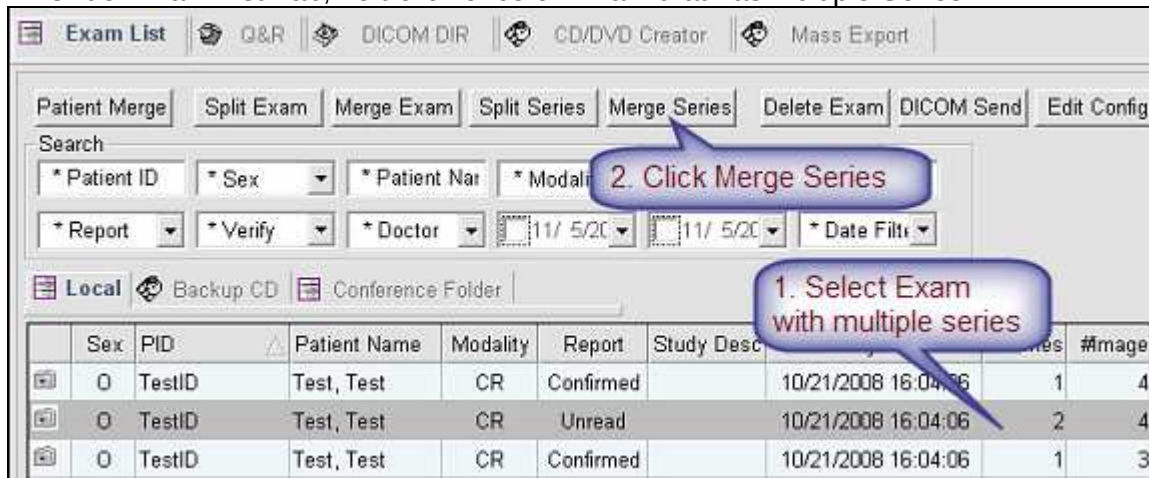
10. Series will split and display as 2 under Series# column:

Patient Merge Split Exam Merge Exam Split Series Merge Series Delete Exam DICOM Send Edit Config									
Search									
* Patient ID	* Sex	* Patient Name	* Modality	* Patient Age	* Study Desc				
* Report	* Verify	* Doctor	11/ 5/20	11/ 5/20	* Date Filter				
Local Backup CD Conference Folder									
	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image
	F	Enter New PID		CR	Unread		10/29/2008 16:04:06	1	1
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	2	3

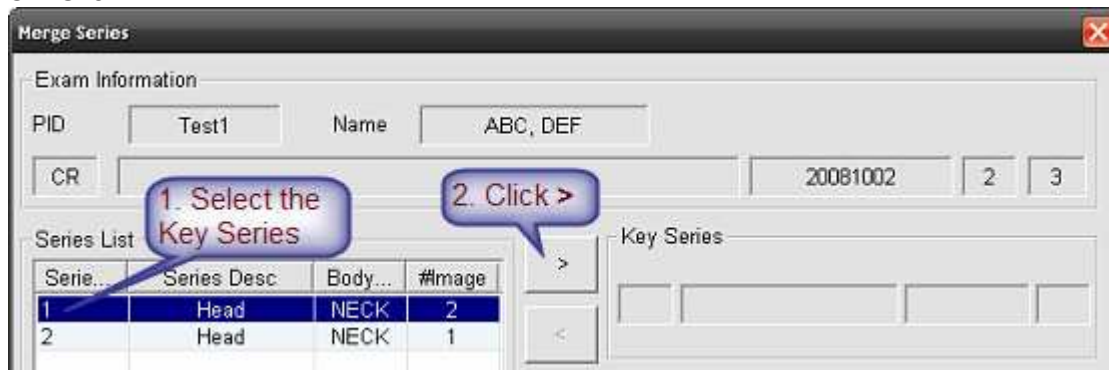
5. Merge Series

Merge Series button is used to merge 2 or more series

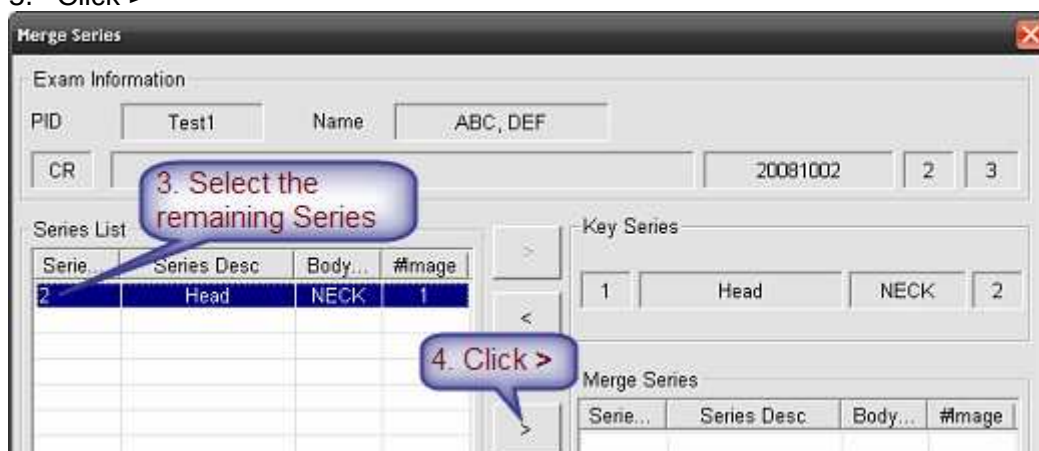
1. Under Exam List Tab, Left-click once on Exam that has multiple Series

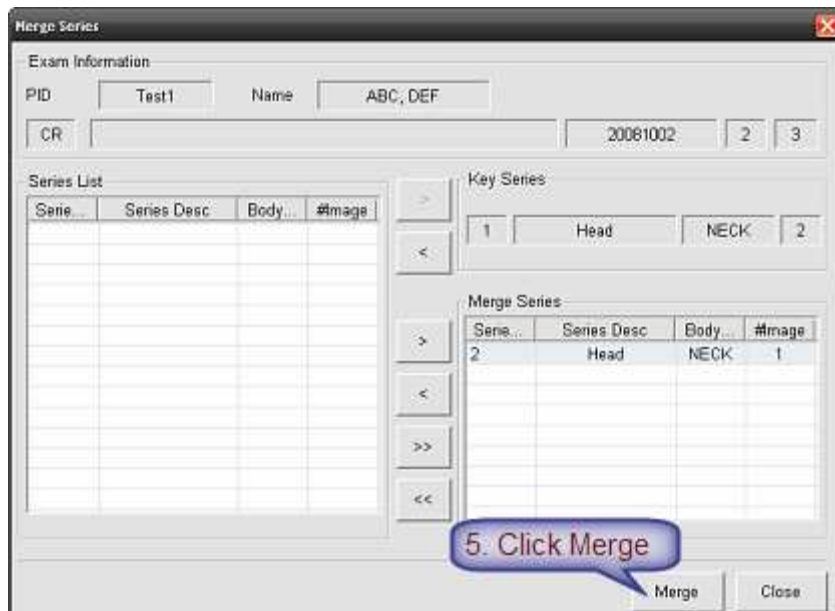
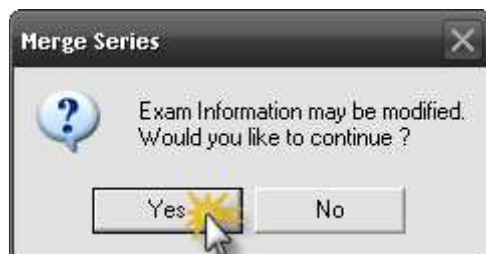


2. On 'Merge Series' window, select series used as key series
3. Click >



4. After Key Series is selected, select the series to be merged
5. Click >



6. Click **Merge**7. User will be prompted, click **Yes** to continue

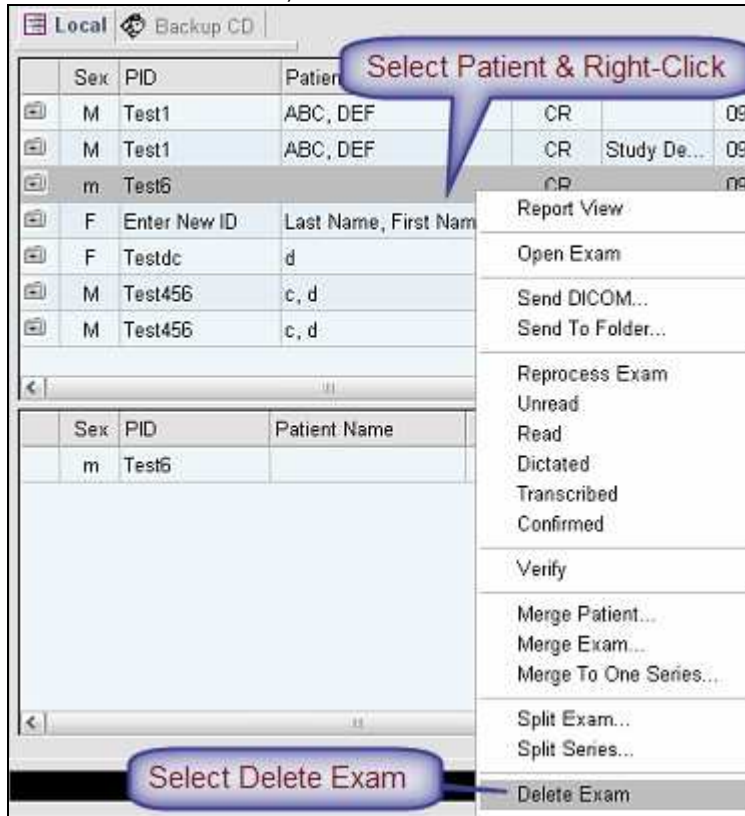
8. Series will be merged and displayed as 1 series

Local Backup CD Conference Folder									
	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image
	F	Enter New PID		CR	Unread		10/29/2008 16:04:06	1	1
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	3

6. Delete Exam

Delete Exam button under Exam List tab is used to delete Exam from Local Database

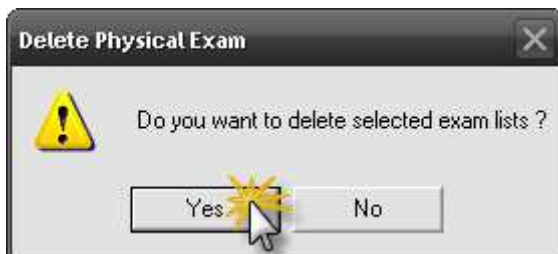
1. Under 'Local' Tab, select Exam that has to be deleted



2. Right-click & select **Delete Exam** OR click **Delete Exam** button



3. User will be prompted to confirm the patient exam that is being deleted, click **Yes** if you are sure to delete Exam



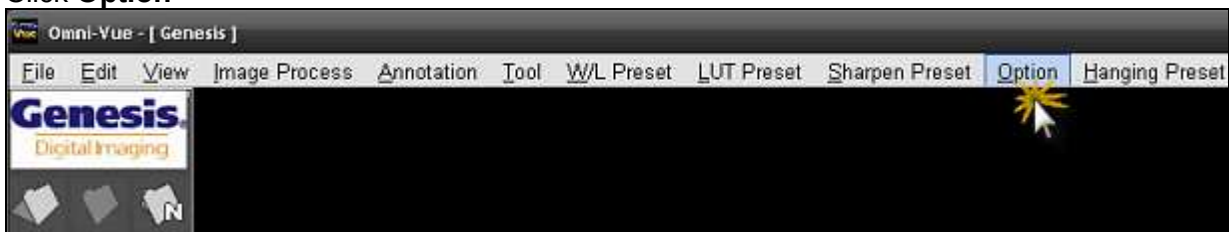
7. DICOM Send

Step One: Configure DICOM Send

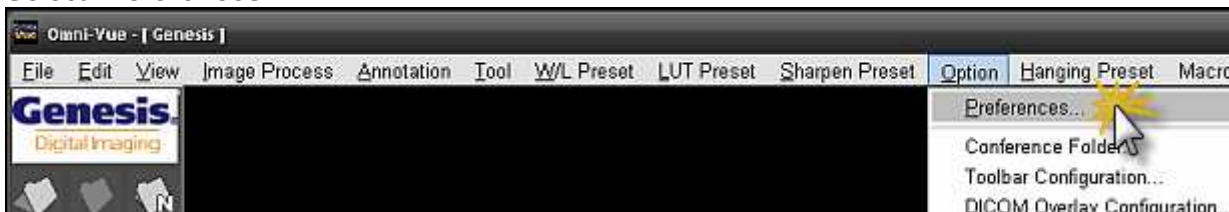
1. Close Worklist by clicking on **Close** button



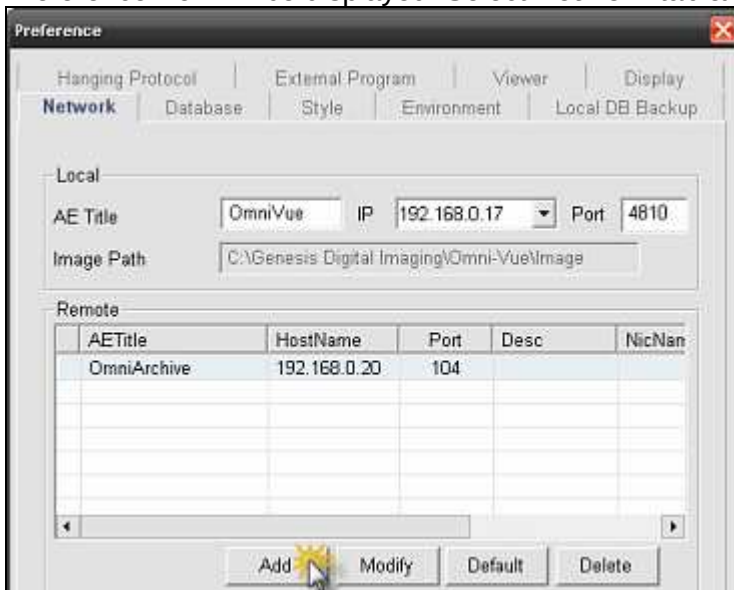
2. Click **Option**



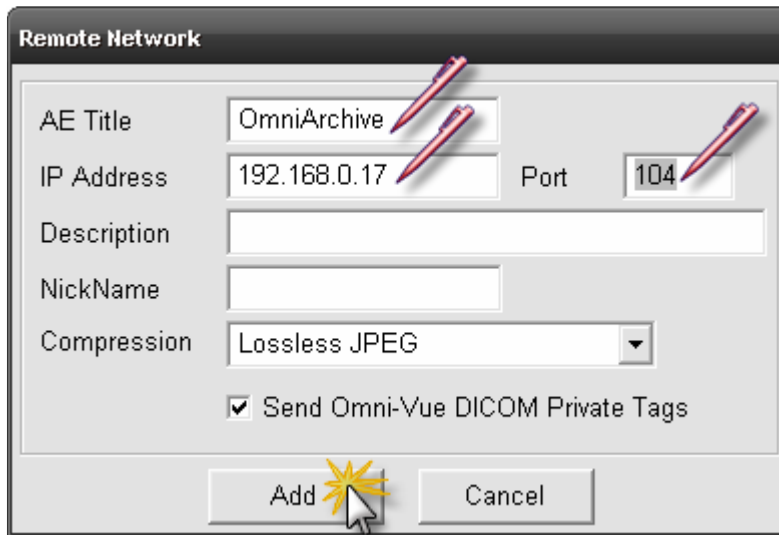
3. Select **Preferences**



4. Preference Box will be displayed. Select **Network** tab & click **Add**



5. Enter **AE Title**, **IP Address** & **Port Number** of the Remote Host & click **ADD**



Remote Network

AE Title: OmniArchive

IP Address: 192.168.0.17 Port: 104

Description:

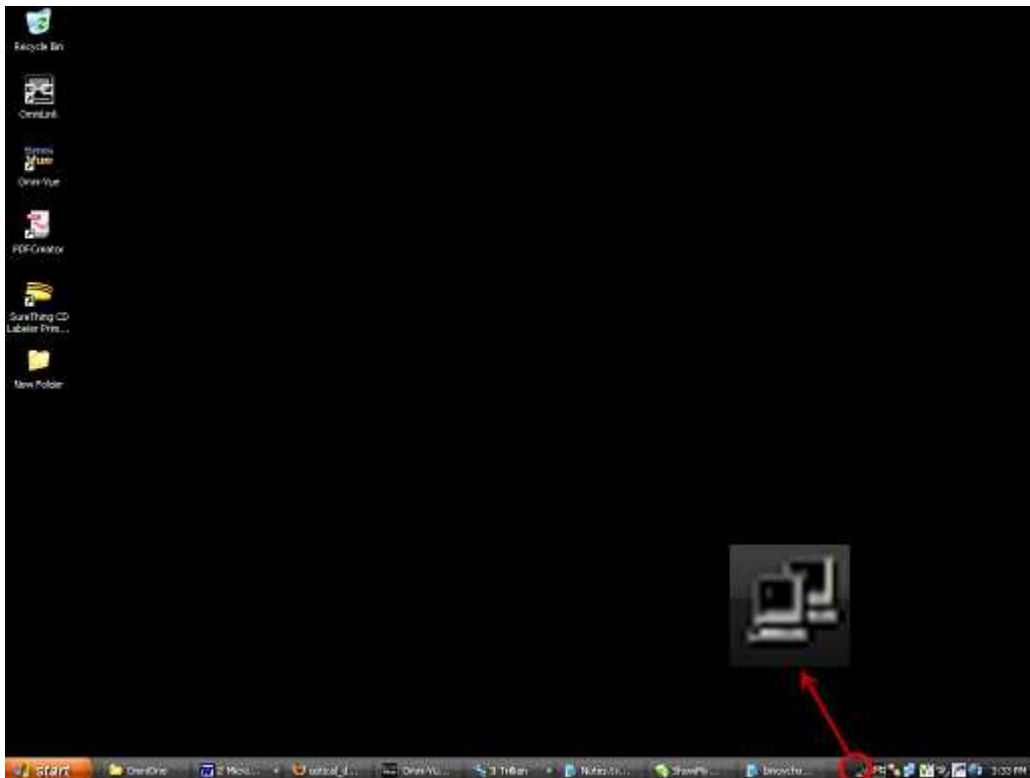
NickName:

Compression: Lossless JPEG

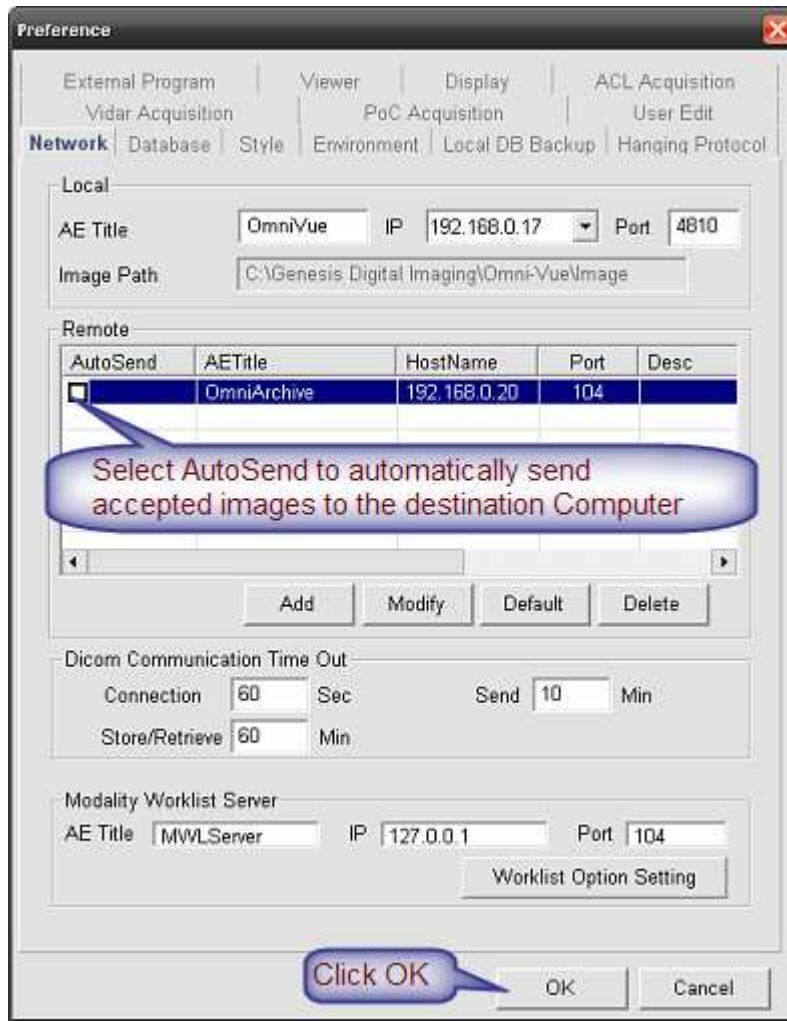
☒ Send Omni-View DICOM Private Tags

Add Cancel

Tip: To obtain necessary information like AE Title, IP Address & Port Number, double-click on computer icon displayed at the bottom right-hand corner of the screen (on taskbar) of receiving workstation.



6. Select **AutoSend** option only if you want to set up automatic DICOM Sends to Remote Host & click **Add**

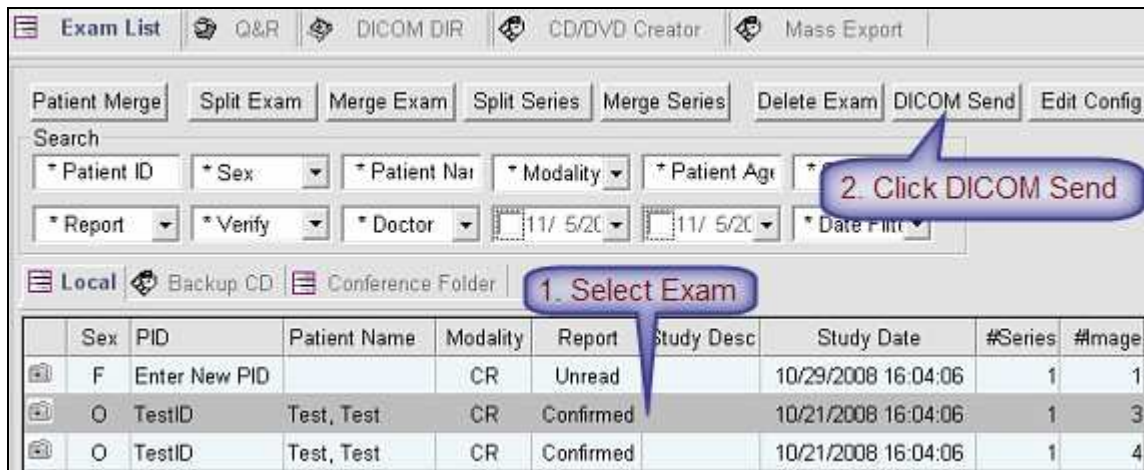


Step Two: Manually Send DICOM images (if AutoSend is not setup)

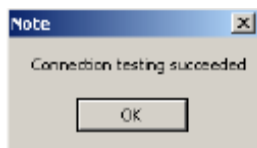
1. Open Worklist by clicking on **Open** folder icon



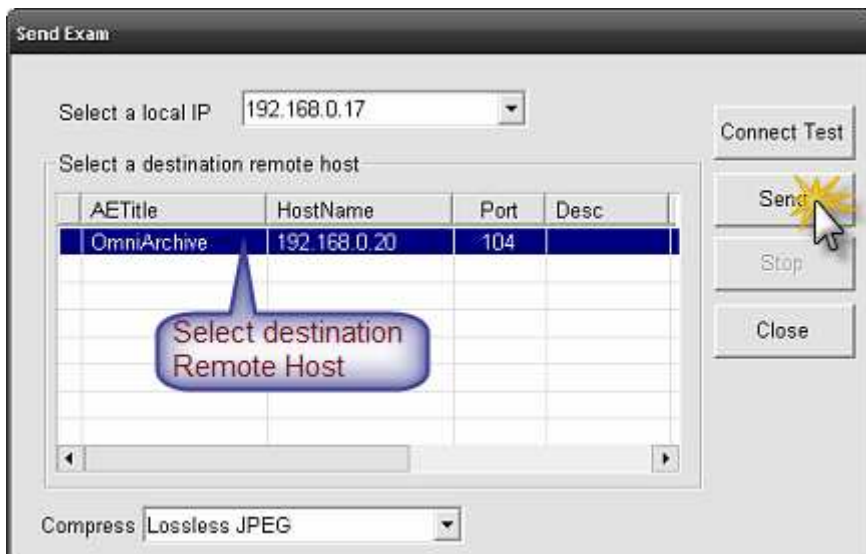
- Under Exam List select the exam to be sent to the Remote Host & click **DICOM Send**



- Select recipient from the list of preprogrammed destinations & click **Connect Test** to verify connection to the recipient.
- If the connection is verified, the following window will be displayed. Click **OK to continue**



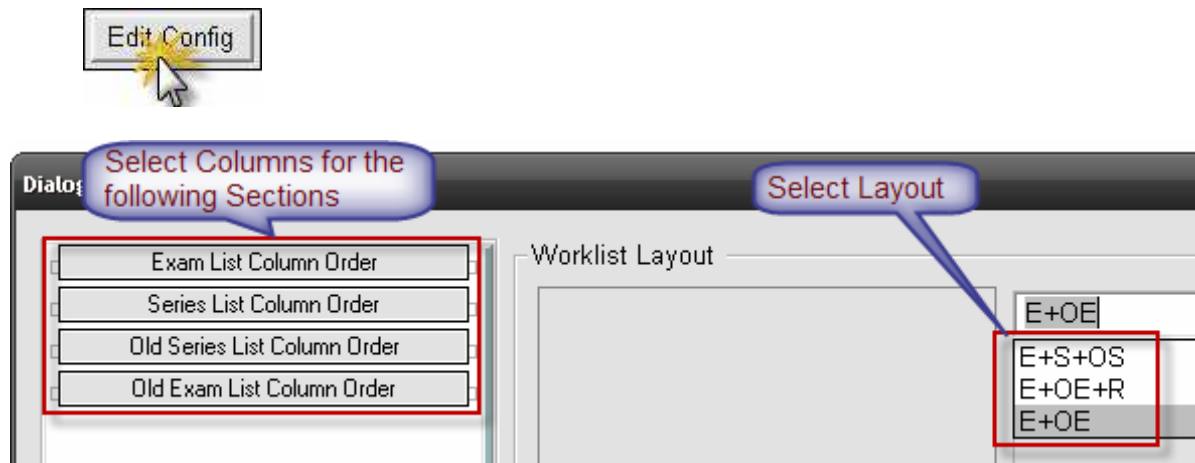
- Click **Send**



8. Edit Config

Edit Config button is used to set up Viewable Columns & Worklist Layout under Exam List Tab

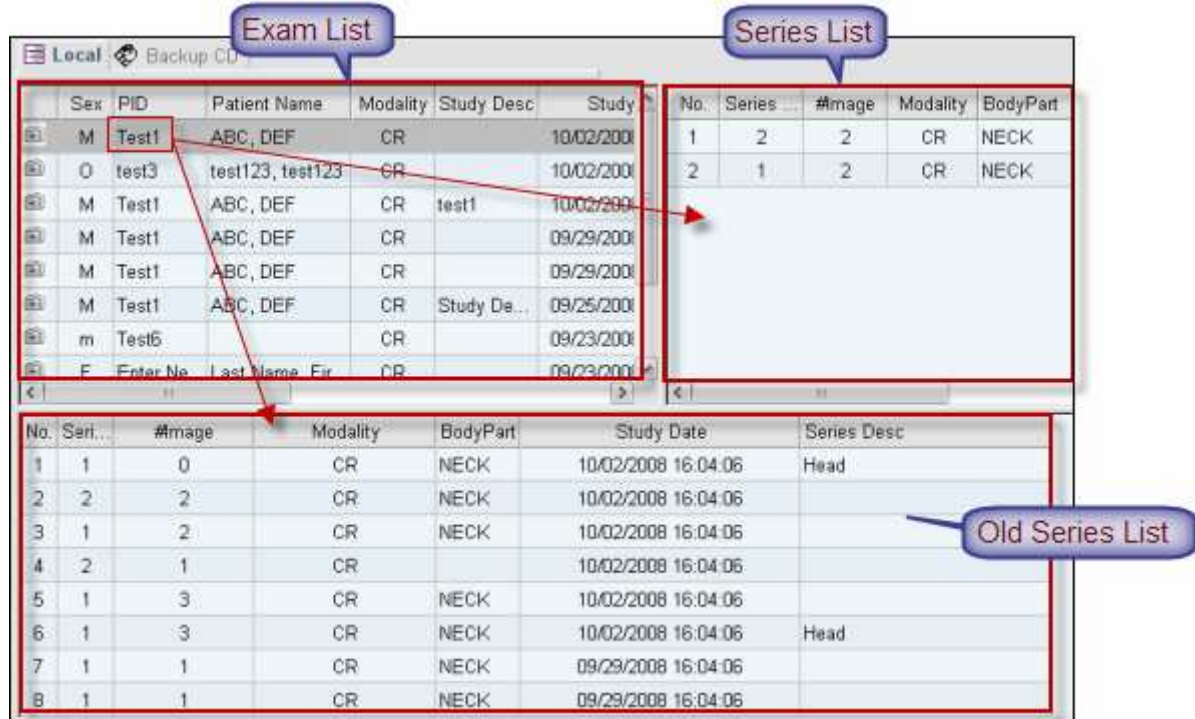
1. Click **Edit Config**



2. Select Layout

Following are the available layouts:

- 1) **E+S+OS: Exam list, Series list and Old Series List Sections Display**



2) E+OE+R: Exam list, Old Exam list and Report Sections Display

The screenshot displays a software interface with three main sections: Exam List, Old Exam List, and Report. The Exam List section at the top contains a table with columns: Sex, PID, Patient Name, Modality, Study Desc, Study Date, #Series, #Image, Report, Verify, Doctor, and AccessNum. The Old Exam List section below it contains a similar table. The Report section on the right shows a 'Report' button and a 'Test Report' area. Red boxes and arrows indicate that data from the Exam List is used to populate the Old Exam List and generate reports.

Sex	PID	Patient Name	Modality	Study Desc	Study Date	#Series	#Image	Report	Verify	Doctor	AccessNum
M	Test1	ABC, DEF	CR		10/02/2008 16:04:06	2	4	Confir...	No		200810021513...
O	test3	test123, test123	CR		10/02/2008 16:04:06	3	4	Confir...	No		200810021404...
M	Test1	ABC, DEF	CR	test1	10/02/2008 16:04:06	4	7	Unread	No		200810021201...
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06	1	1	Unread	No		200809290920...
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06	1	1	Unread	No		200809290920...
M	Test1	ABC, DEF	CR	Study De...	09/25/2008 16:04:06	1	1	Unread	No	Ref...	02234318
m	Test6		CR		09/23/2008 16:04:06	1	1	Unread	No		200809231652...
F	Enter Ne...	Last Name, Fir...	CR		09/23/2008 16:04:06	1	3	Unread	No		02234318

Sex	PID	Patient Name	Modality	Study Desc	Study Date
M	Test1	ABC, DEF	CR		10/02/2008 16:04:06
M	Test1	ABC, DEF	CR	test1	10/02/2008 16:04:06
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06
M	Test1	ABC, DEF	CR	Study De...	09/25/2008 16:04:06

Report section controls: Doctor1, Doctor2, Genesis, Normal, NONE

3) E+OE: Exam list and Old Exam list Sections Display (default view)

The screenshot displays a software interface with two main sections: Exam List and Old Exam List. The Exam List section at the top contains a table with columns: Sex, PID, Patient Name, Modality, Study Desc, Study Date, #Series, #Image, Report, Verify, Doctor. The Old Exam List section below it contains a similar table. Red boxes and arrows indicate that data from the Exam List is used to populate the Old Exam List.

Sex	PID	Patient Name	Modality	Study Desc	Study Date	#Series	#Image	Report	Verify	Doctor
M	Test1	ABC, DEF	CR		10/02/2008 16:04:06	2	4	Confir...	No	
O	test3	test123, test123	CR		10/02/2008 16:04:06	3	4	Confir...	No	
M	Test1	ABC, DEF	CR	test1	10/02/2008 16:04:06	4	7	Unread	No	
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06	1	1	Unread	No	
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06	1	1	Unread	No	
M	Test1	ABC, DEF	CR	Study De...	09/25/2008 16:04:06	1	1	Unread	No	Ref...
m	Test6		CR		09/23/2008 16:04:06	1	1	Unread	No	
F	Enter Ne...	Last Name, Fir...	CR		09/23/2008 16:04:06	1	3	Unread	No	

Sex	PID	Patient Name	Modality	Study Desc	Study Date	#Series	#Image	Report	Ver
M	Test1	ABC, DEF	CR		10/02/2008 16:04:06	2	4	Confir...	N
M	Test1	ABC, DEF	CR	test1	10/02/2008 16:04:06	4	7	Unread	N
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06	1	1	Unread	N
M	Test1	ABC, DEF	CR		09/29/2008 16:04:06	1	1	Unread	N
M	Test1	ABC, DEF	CR	Study De...	09/25/2008 16:04:06	1	1	Unread	N

3. Select Columns to be displayed for each section in the Layout



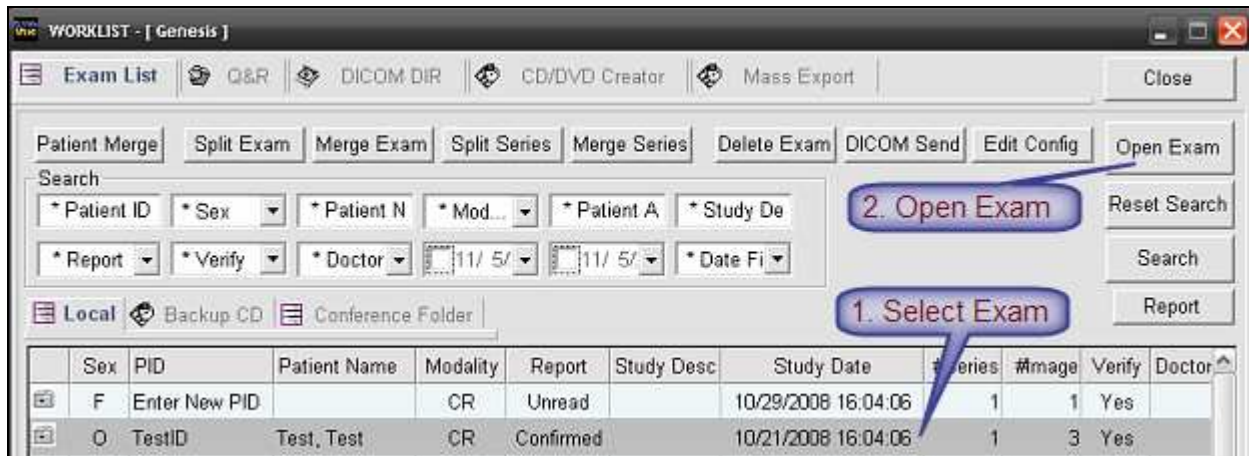
4. Repeat the same for all other sections (series list, old series list and/or old exam list)
5. Click **OK** on Dialog window



9. Open Exam

“Open Image” button is used to view image/s

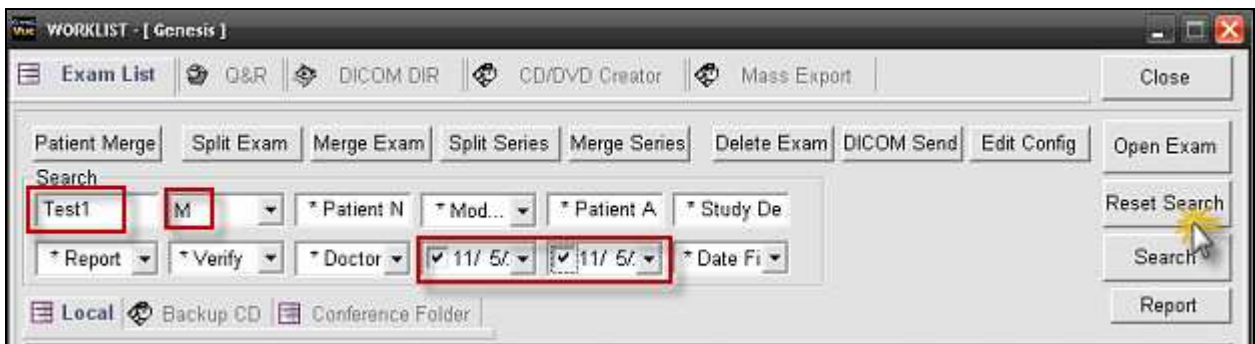
1. Select Exam & Click **Open Exam**



10. Reset Search

This button is used to refresh the displayed list based on selected search criteria.

1. In the following example, the selected search criteria's are displayed in the red box
2. Click **Reset Search**



3. Clicking **Reset Search** button will clear fields and display complete list of Exams



11. Search

When the exam list is large, this feature is used to narrow the search results.

1. To list exams for a specific month, select check both boxes for start and end dates
2. Enter desired dates respectively

3. Click **Search**



4. Search results will display exams for selected period

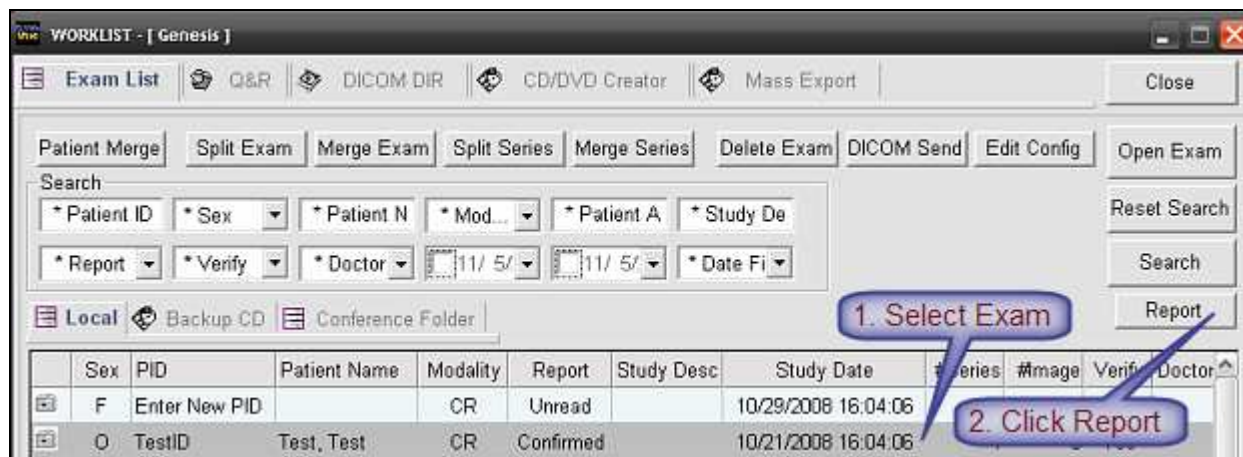
	Sex	PID	Patient Name	Modality	Report	Study Desc	Study Date	#Series	#Image	Verify	Doctor
	F	Enter New PID		CR	Unread		10/29/2008 16:04:06	1	1	Yes	2
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	3	Yes	2
	O	TestID	Test, Test	CR	Confirmed		10/21/2008 16:04:06	1	4	No	2
	O	TestID	Test, Test	CR	Unread		10/21/2008 16:04:06	1	4	Yes	2

12. Report

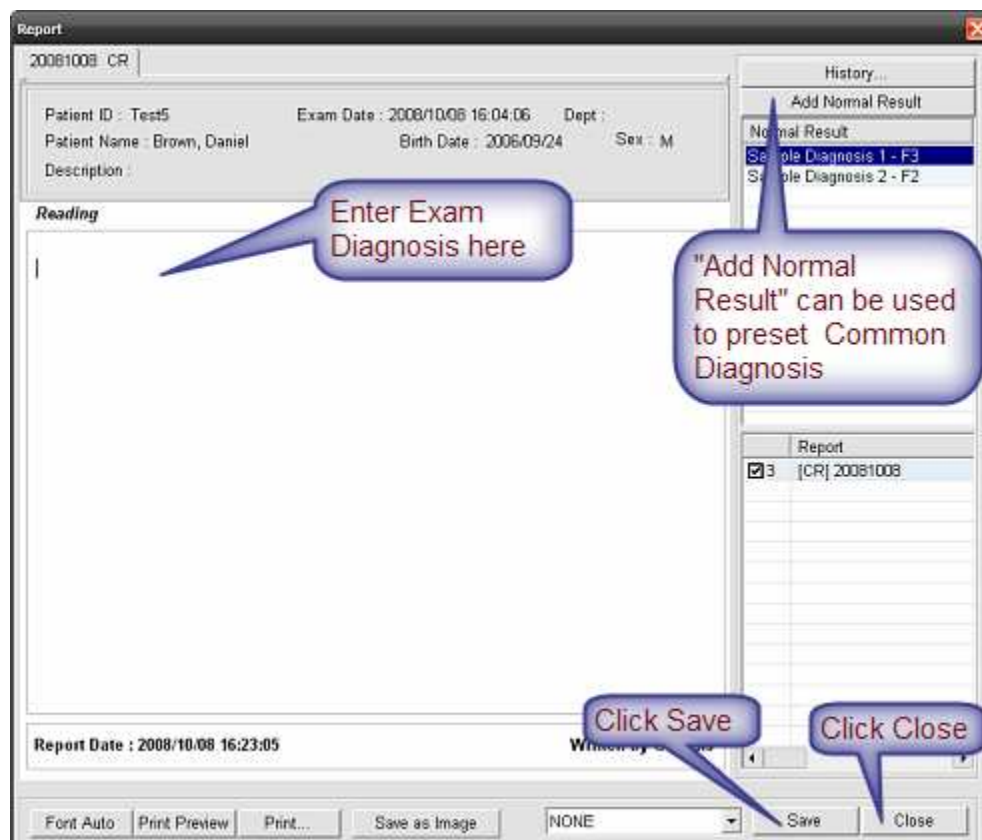
This feature allows the user to add diagnosis to any Exam.

When selected, the report can be included when creating CD/DVDs or can be printed.

1. Select Exam & click **Report**



2. Enter Diagnosis, click **Save** & then click **Close**



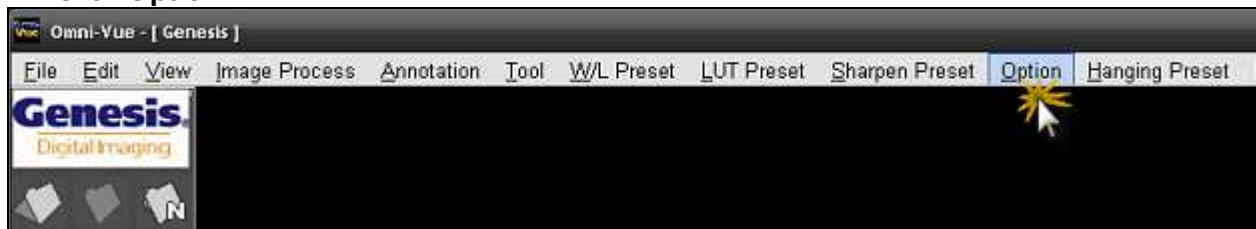
2. Q&R (Query & Retrieve)

Q&R tab is used to retrieve DICOM images from any PACS appliance that supports DICOM 3.0 standards

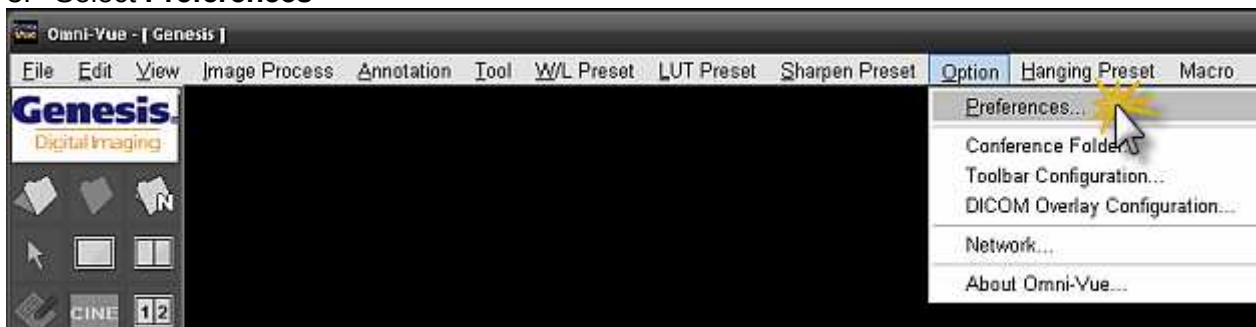
1. Click **Close** to close the Worklist Window

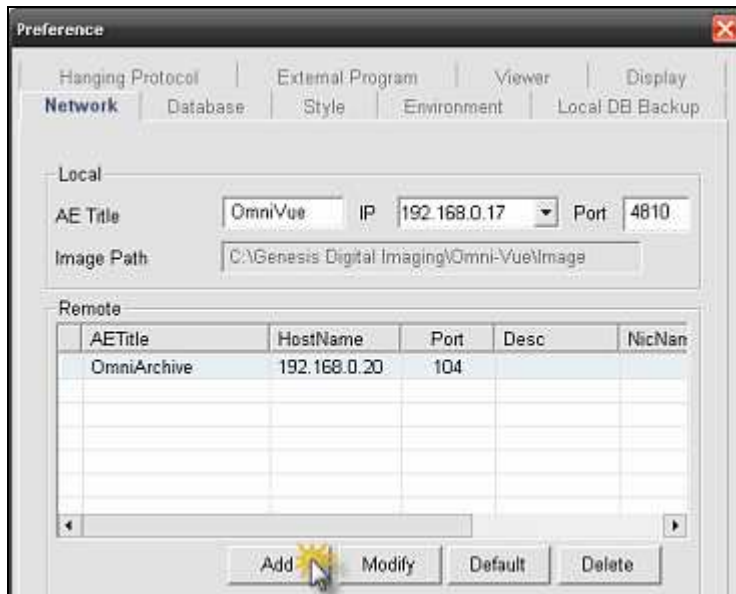
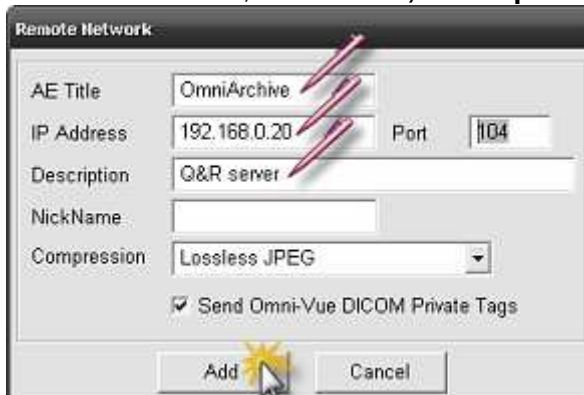


2. Click **Option**

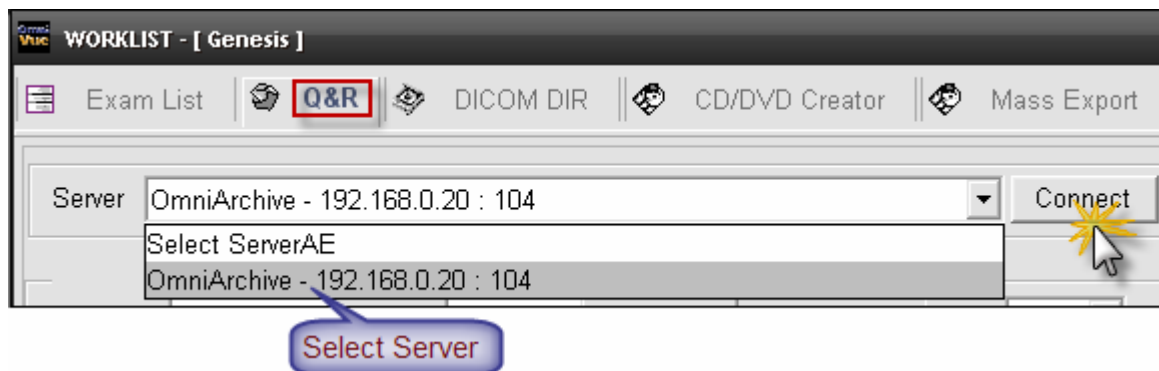


3. Select **Preferences**

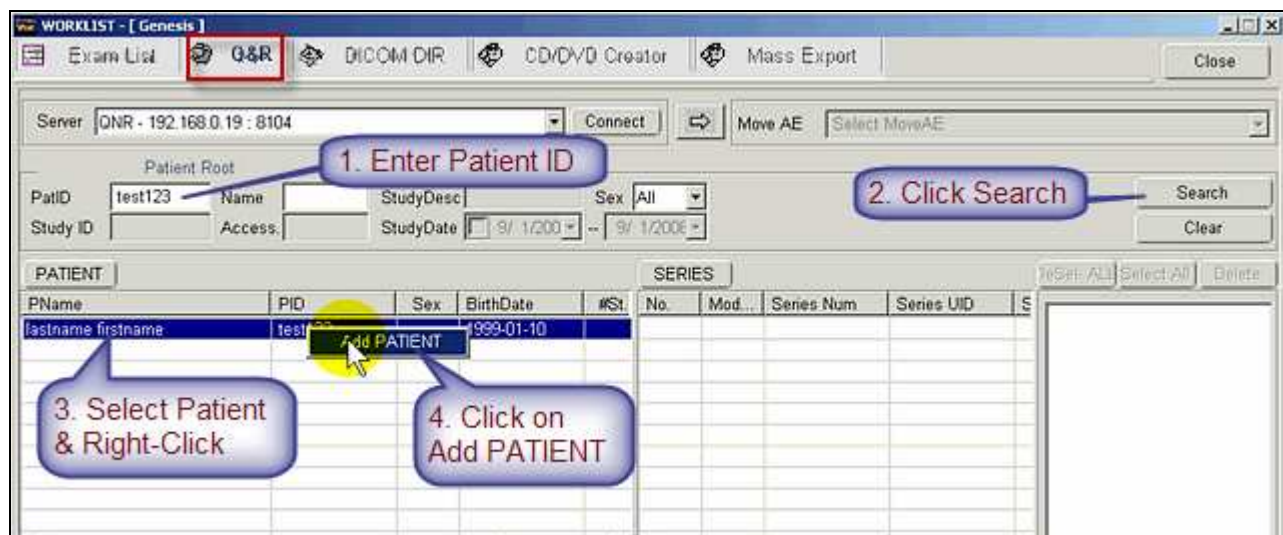


4. Select **Network tab & Click **Add******5. Enter **AE Title**, **IP address**, **Description** and click **Add******6. Click **OK** on 'Preferences' window****7. To Open Worklist, click on **Open folder icon****

8. Select **Q & R** tab under Worklist
9. Select from the list of pre-programmed servers
10. Click **Connect**



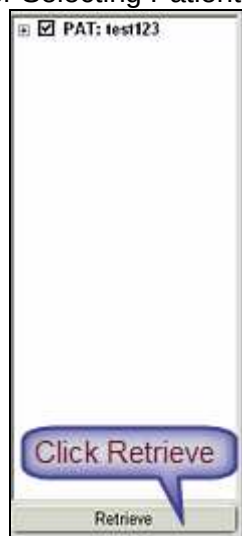
11. In **PatID** field enter Patient ID (to search for a specific patient)
12. Click **Search**
13. If the Patient ID exists on the remote server, then it will be displayed on the list
14. Right-click on line item under Patient section to retrieve entire exam
15. Select Add PATIENT (should display patient info on right portion of the page)



Note:

- Click once on line item under Patient Section to View individual Study
- Click once on line item under Study Section to View individual Series
- Click once on line item under Series Section to View individual Image

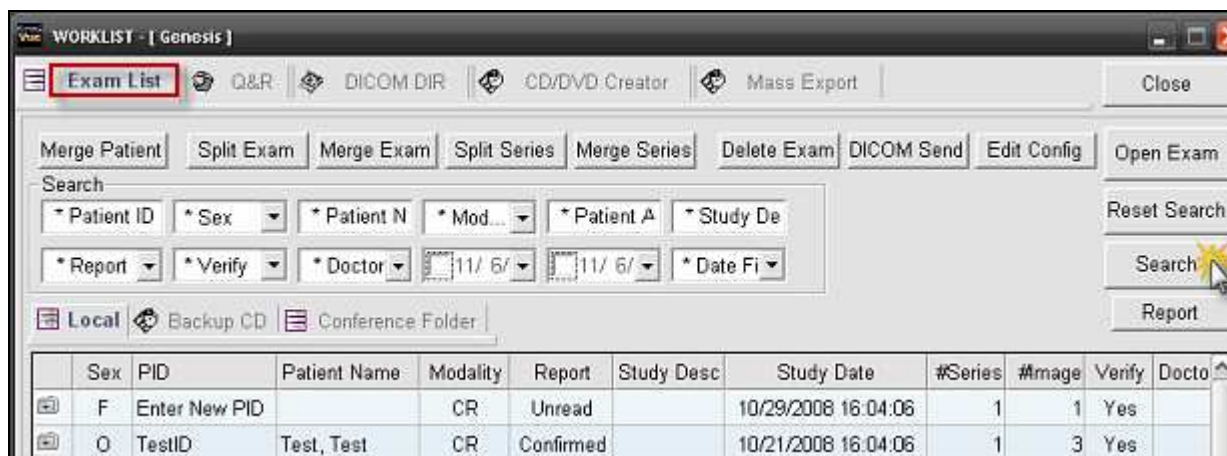
16. After Selecting Patient, click **Retrieve**



17. Click **OK** to complete Q & R process



18. To view retrieved patient info, select **Exam List** tab under Worklist
 19. Click **Search** to refresh the list thus displaying the newly retrieved Exam



3. DICOM DIR

DICOM DIR tab is used to upload DICOMDIR files from CD/DVD or External-Drive.

a. Upload DICOM Dir files into OmniVue

1. Insert the CD or the USB Key containing the DICOM Dir files
2. Select **DICOM Dir** tab



3. Select the Path



4. To view all Exams, click **Search**



5. To view a specific exam, enter patient ID or patient name and click **Search**



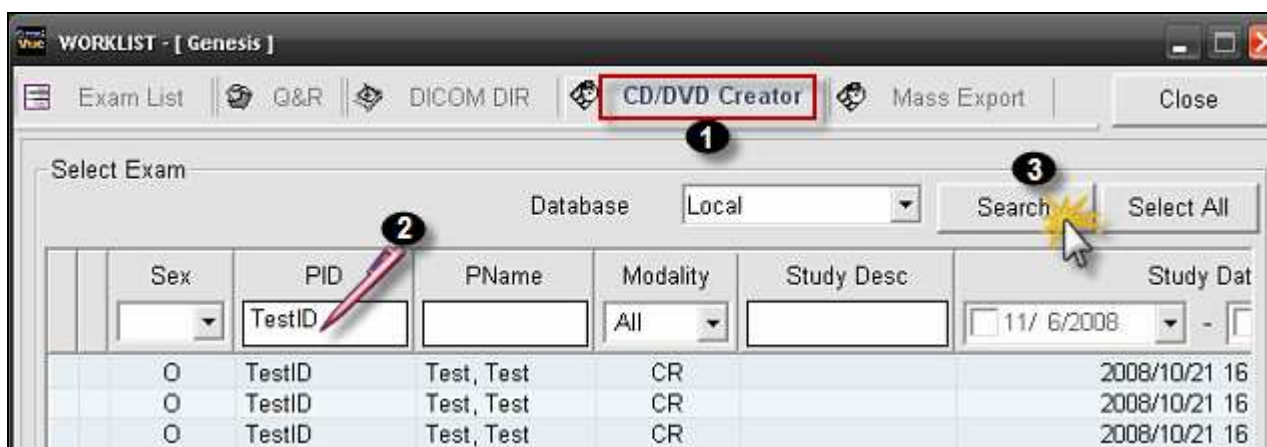
4. CD/DVD Creator

CD/DVD Creator tab is used for making Client CD/DVD's

1. Client CD burning

This feature creates a CD/DVD containing patient's exam. The Exam can be viewed by using simple viewer that is included on CD/DVD. Simple viewer launches automatically when CD/DVD is inserted.

1. Select **CD/DVD Creator** tab
2. To search for a specific patient, enter patient ID
3. Click **Search**



4. Click once on line item to select Patient Exam
5. Select **Copy**
6. Select **Include Report**
7. Select one of the following **Compression formats**:
 - Keep Original Compression
 - Uncompressed
 - Lossless JPEG
 - Lossy-Minimal
 - Lossy-Mid
 - Lossy-Moderate
 - Lossy-Severe
 - Lossy-Very severe

The screenshot shows the 'Select Exam' dialog box. At the top, there are fields for 'Sex' (dropdown), 'PID' (text: 'Test1'), 'PName' (text: 'ABC, DEF'), 'Modality' (dropdown: 'All'), 'Study Desc' (text: 'Study Description'), and 'Study Date' (range: '10/ 1/2008' to '10/ 8/2008'). Below these are search and 'Select All' buttons. A table lists exam entries with columns for Sex, PID, PName, Modality, Study Desc, and Study Date. The fourth row is selected. Callout 4 points to this row with the text 'Select Individual Exam OR Select All'. Below the table, callout 5 points to the 'Backup Method' section where 'Copy' is selected. Callout 6 points to the 'Include Report' checkbox, which is checked. Callout 7 points to a dropdown menu showing compression formats, with 'Lossless JPEG' selected. The status bar at the bottom indicates '1 Exam / 1 Images'.

Sex	PID	PName	Modality	Study Desc	Study Date
M	Test1	ABC, DEF	CR		2008/09/29 16:04:06
M	Test1	ABC, DEF	CR		2008/09/29 16:04:06
M	Test1	ABC, DEF	CR		2008/09/29 16:04:06
M	Test1	ABC, DEF	CR	Study Description	2008/09/25 16:04:06

Backup CD

Backup Path: C:\Genesis Digital Imaging\Omni-Vue\CDDVDBackup

Backup Method: ☒ Copy ☐ Move

☒ Include Report

Status: 1 Exam / 1 Images

Compression Format: Lossless JPEG

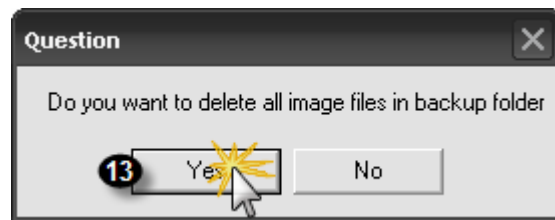
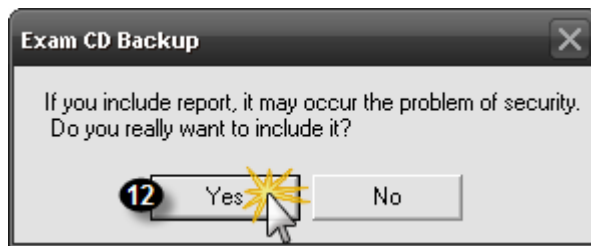
- Keep Original Compression
- Uncompressed
- Lossless JPEG
- Lossy-Minimal
- Lossy-Mild
- Lossy-moderate
- Lossy-Severe

8. Insert **Blank CD** into CD-ROM
9. Select **CD Burning Device** (this window displays all available CD/DVD burning devices on your computer)
10. Select **Direct CD Burning**
11. Click **Backup**



12. Click **Yes** on prompt that says “if you want to include report....”

13. Click **Yes** on prompt that says “Do you want to delete all image files in backup folder”



14. OmniVue will now burn the CD

15. CD/DVD will automatically eject when a successful burn process is completed

16. To test CD, **Close** OmniVue

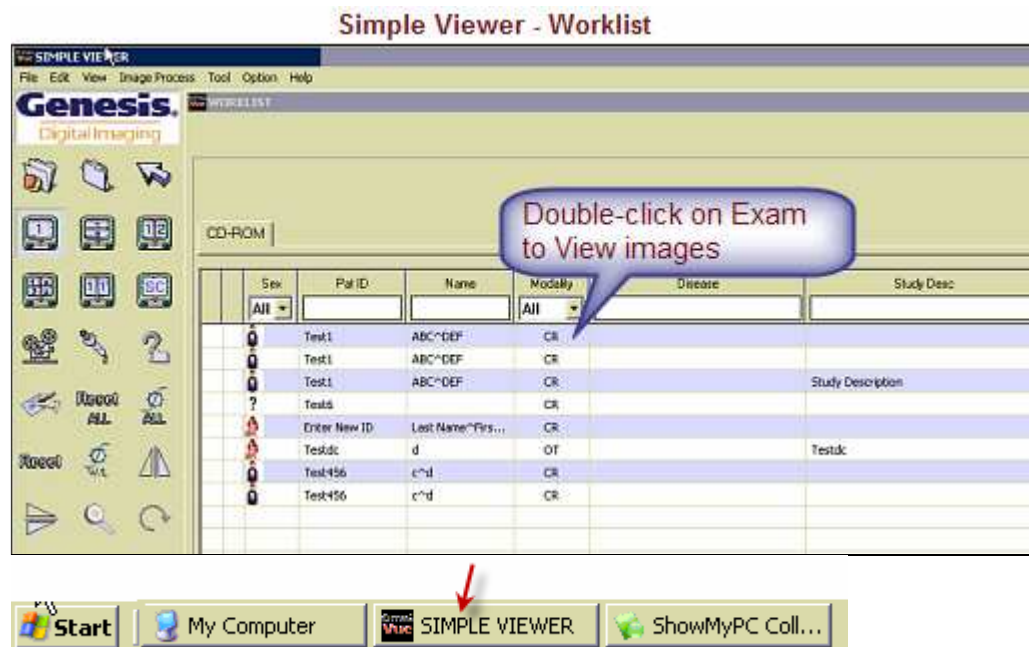
17. Insert CD into any PC platform which runs Windows XP or Vista

18. Wait for simple viewer to automatically launch

19. Simple viewer is very similar to OmniVue with most commonly used features

20. To view image double-click on any **line item** under Worklist/CD-ROM

Note You must Close Simple Viewer before ejecting CD

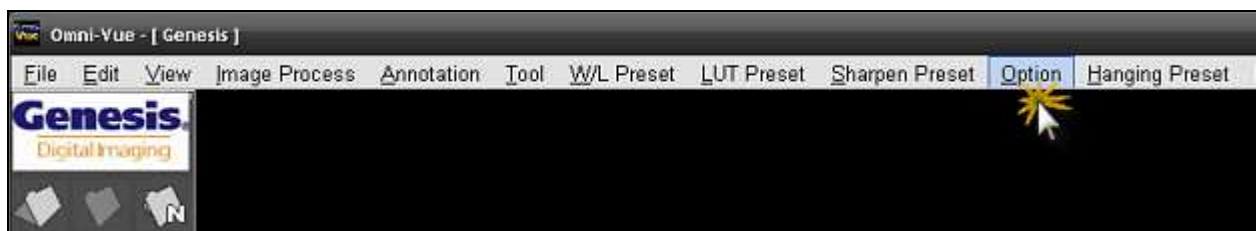


2. Archive/Backup to DVD/CD

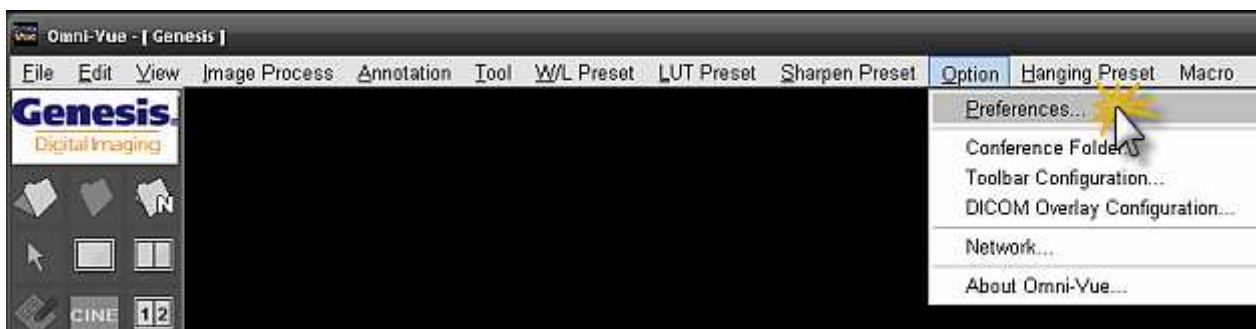
1. Click **Close** to close Worklist window



2. Go to **Option**

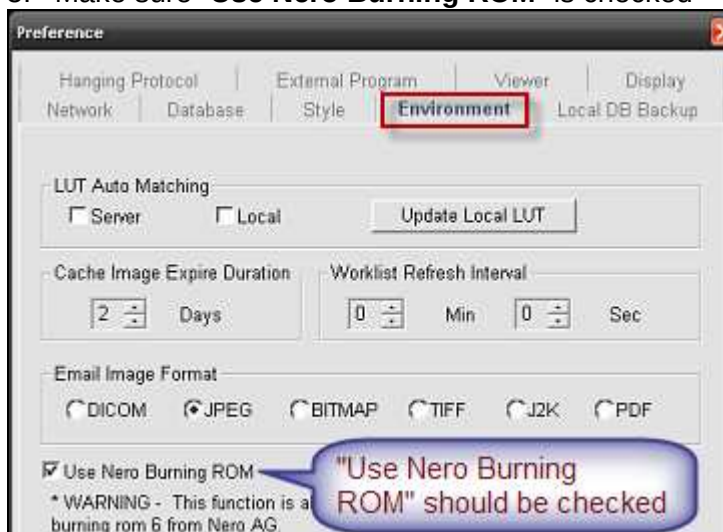


3. Select **Preferences**



4. Select **Environment** tab

5. Make sure “Use Nero Burning ROM” is checked

6. Click **OK**

Note Nero Burning Rom Software (v. 6 or higher) must be installed prior to creating CDs or DVDs. An OEM license is included with each OmniVue purchase.

7. Click **Open folder icon** (to go to Worklist Window)8. Select **CD/DVD Creator** tab

9. Under Study Date unselect the dates

10. Enter the desired date range for backup (for complete list do leave all fields blank)

11. Click **Search** to refresh screen12. Click **Select All** to select all exams displayed in the list OR hold **Ctrl** key on Keyboard to select individual exams

13. Select **Include Report** (if required)
14. Select one of the following **Compression formats**
 - Keep Original Compression
 - Uncompressed
 - Lossless JPEG
 - Lossy-Minimal
 - Lossy-Mid
 - Lossy-Moderate
 - Lossy-Severe
 - Lossy-Very severe

Note user can select Lossless JPEG to store image without losing image quality and maximize space on the CD or DVD

The screenshot shows the 'Select Exam' dialog box. At the top, there are fields for 'Database' (set to 'Local'), 'Search', and 'Select All'. Below these is a table with columns: Sex, PID, PName, Modality, Study Desc, and Study Date. The table contains four rows of data. A callout 'Click Select All' points to the 'Select All' button. Below the table, there are fields for 'Backup CD', 'Backup Path' (C:\Genesis Digital Imaging\Omni-Vue\CDDVDBackup), 'Backup Method' (radio buttons for 'Copy' and 'Move'), and 'Include Report' (checked). A callout 'Select Copy' points to the 'Copy' radio button. A callout 'Select Include Report' points to the 'Include Report' checkbox. Below these are 'Status' (1 Exam / 1 Images) and 'Selected Size' (1.73 MB). A callout 'Select Compression' points to a dropdown menu showing compression options: Lossless JPEG, Keep Original Compression, Uncompressed, Lossless JPEG, Lossy-Minimal, Lossy-Mid, Lossy-moderate, and Lossy-Severe.

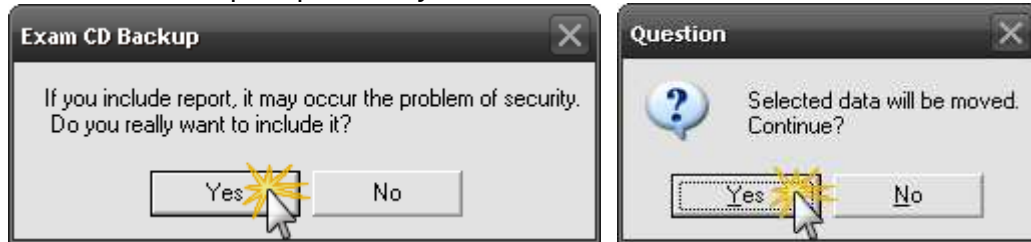
Sex	PID	PName	Modality	Study Desc	Study Date
M	Test1	ABC, DEF	CR		2008/09/29 16:04:06
M	Test1	ABC, DEF	CR		2008/09/29 16:04:06
M	Test1	ABC, DEF	CR		2008/09/29 16:04:06
M	Test1	ABC, DEF	CR	Study Description	2008/09/25 16:04:06

15. Select **CD Burning Device**
16. Select **Direct CD Burning**
17. Insert **Blank CD or DVD** into CD-ROM
18. Click **Backup**

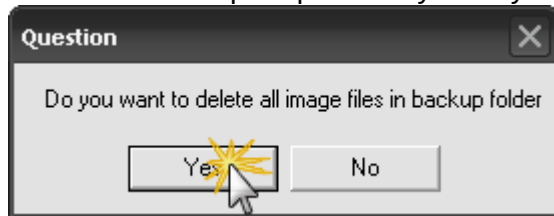
The screenshot shows the 'CD Burning Device' dialog box. It has a dropdown for 'CD Burning Device' (set to 'TSSTcorp DVD+RW TS-L633A'), a 'Max' button, and a 'Direct CD Burning' checkbox (checked). A callout 'Select DVD Option' points to the 'CD Burning Device' dropdown. A callout 'Select Direct CD Burning' points to the 'Direct CD Burning' checkbox. There is a 'Backup' button and a status bar showing 'EXAM# [4] SERIES# [9] IMAGE# [13]'.

19. Click **Yes** on prompt that says “if you want to include report.....”

20. Click **Yes** on prompt that says “The Select Data will be moved. Continue?”



21. Click **Yes** on prompt that says “Do you want to delete all image files in backup folder”



22. Burn process will begin

23. Once Exams have successfully moved to the CD/DVD, CD burner will automatically eject the CD/DVD

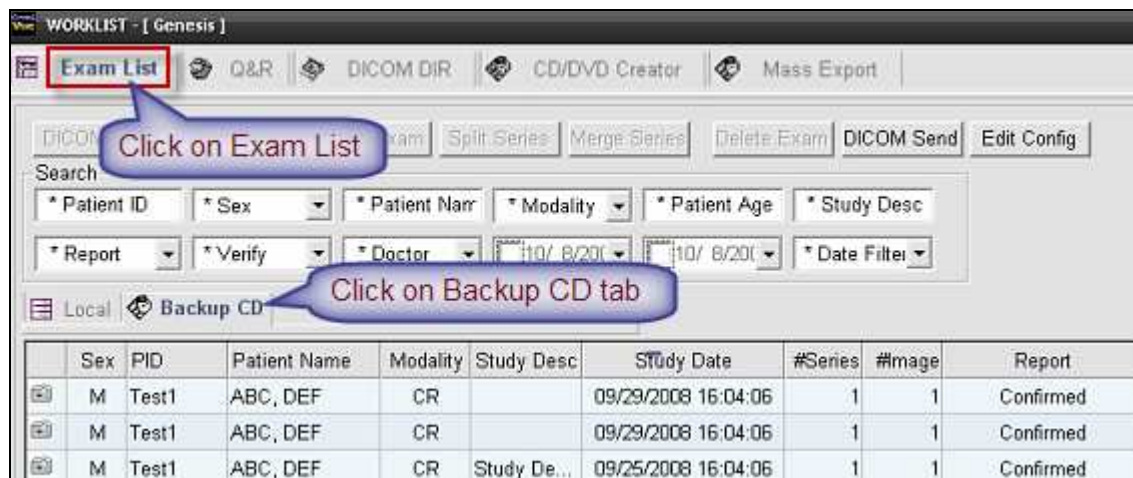
24. To view and/or retrieve exam from CD/DVD, insert CD/DVD into reading device

25. Close any pop-up window on the desktop (when CD is inserted)

26. Select **Exam List** tab in OmniVue

27. Select **Backup CD** tab

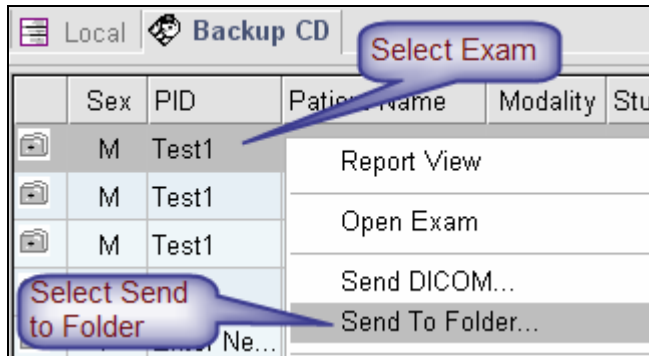
28. Exams from the CD are automatically displayed under this tab



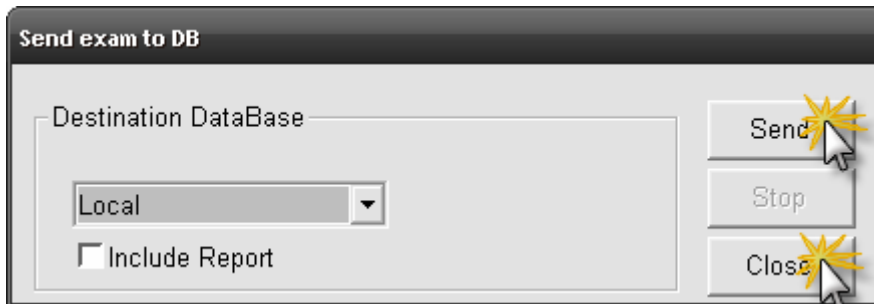
29. To View the image double-click on **Line item**

To restore exam/s from CD/DVD to local database:

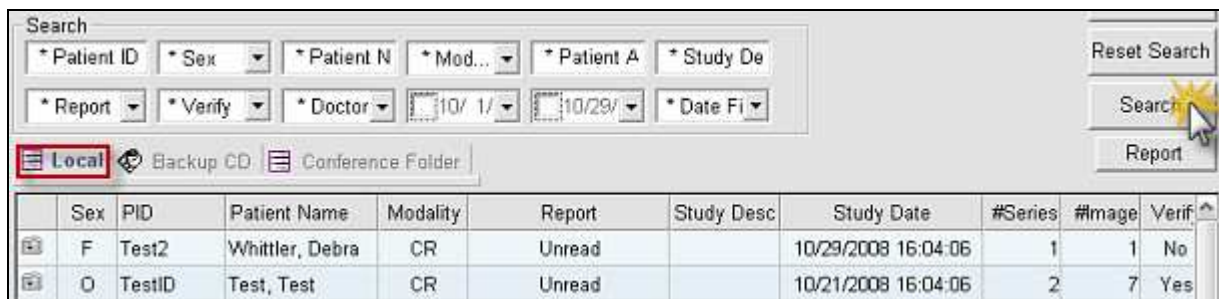
1. Select Exam & **Right-click** (To select all exams click **Ctrl+A** on keyboard)
2. Select **Sent to Folder**



3. Click **Send**, wait & then click **Close**



4. Select **Local** tab
5. Click **Search** to refresh. The restored exam/s will be displayed under the "Local" tab

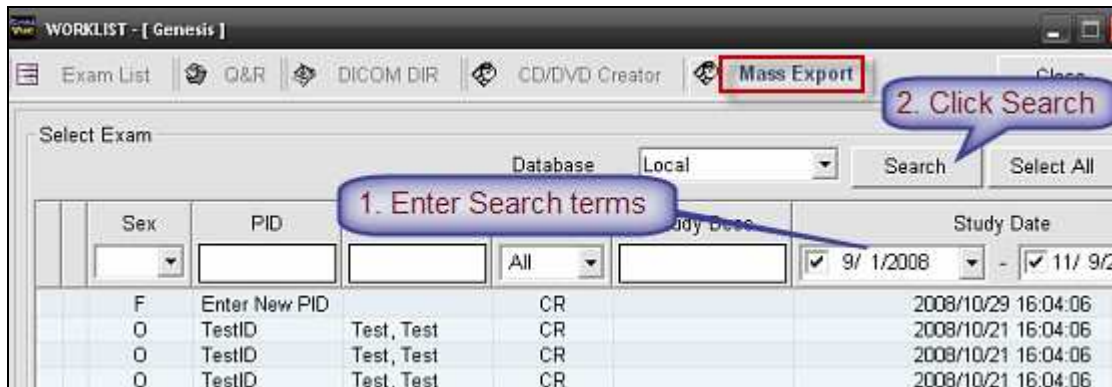


5. Mass Export

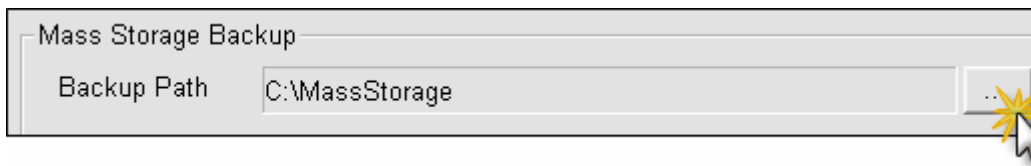
This feature enables user to export multiple exams (DICOM files only) to local or network path, or an external hard drive/USB flash drive

Select **Mass Export** tab and select database (Local, OmniArchive or OmniOne)

1. Select search criteria for exams that have to be moved or copied
2. Click Search to refresh list



3. Click on the browse button "..."



4. Browse to destination location & click **OK**



5. Click **Select All**
6. Select **Copy** OR **Move**
7. Select **Compression format**
8. Click **Backup**

Select Exam

Database: Local Search Select All

	Sex	PID	PName	Modality	Study Desc	
				All		9/ 1/2008 - 10
	M	Test1	ABC, DEF	CR		2008/10/02 16:04
	M	Test1	ABC, DEF	CR		2008/09/29 16:04
	M	Test1	ABC, DEF	CR		2008/09/29 16:04
	M	Test1	ABC, DEF	CR	Study Description	2008/09/25 16:04
	F	Enter New ID	Last Name, ...	CR		2008/09/23 16:04

1. Click Select All

Mass Storage Backup

Backup Path: C:\MassStorage\MassBackup

Backup Method: ☒ Copy ☐ Move

Status: 7 Exam / 12 Images Selected Size : 9.54 MB

2. Select Copy

3. Select Compression

Lossless JPEG

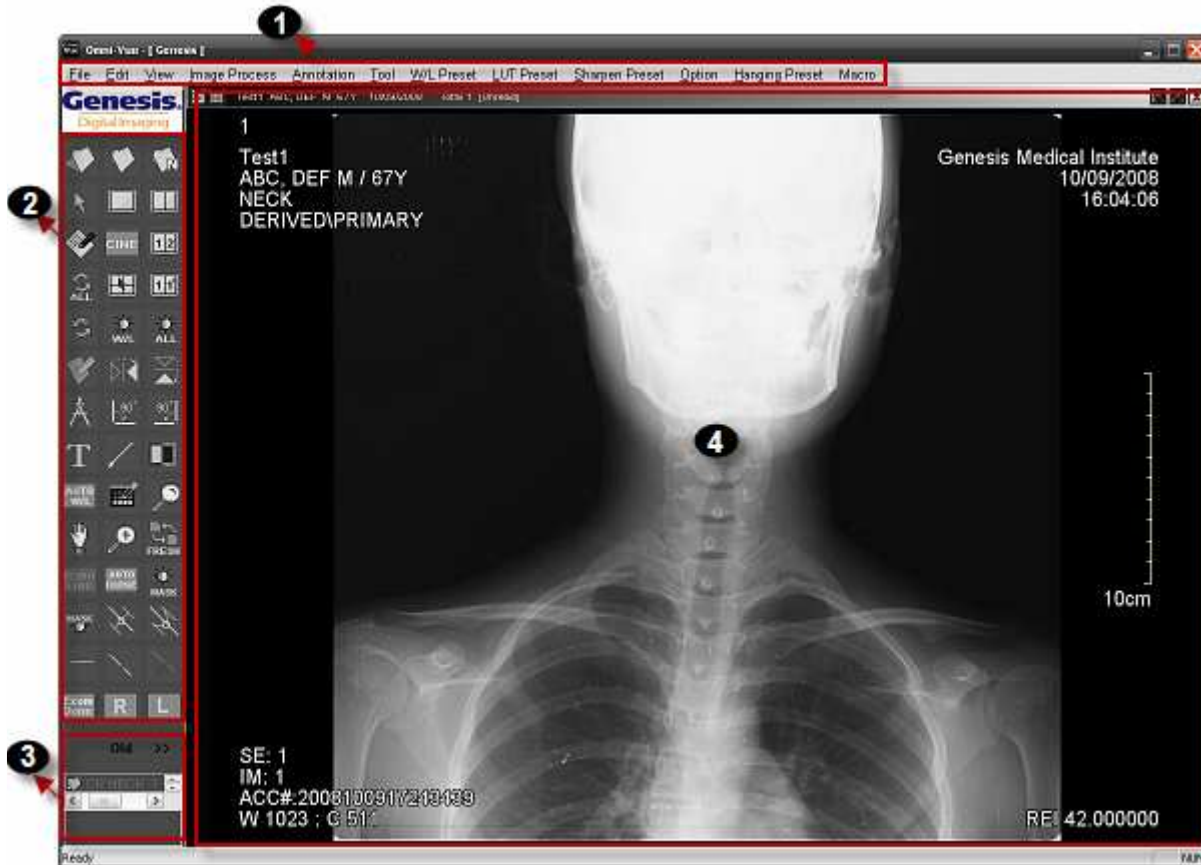
- Keep Original Compression
- Uncompressed
- Lossless JPEG
- Lossy-Minimal
- Lossy-Mild
- Lossy-moderate
- Lossy-Severe
- Lossy-Very severe

Backup completed. 3/3 files successful.

4. Click Backup

Backup

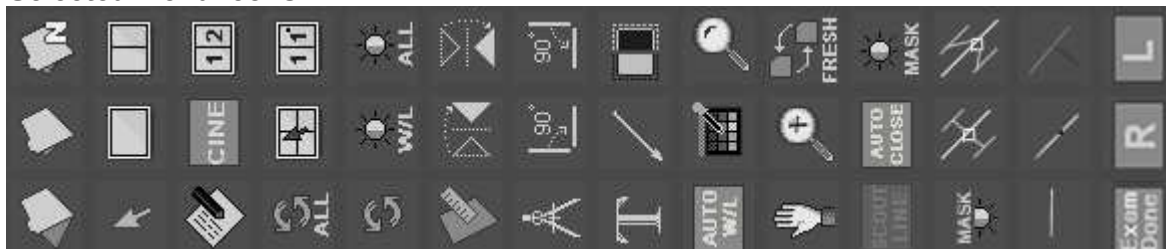
Display Window Details



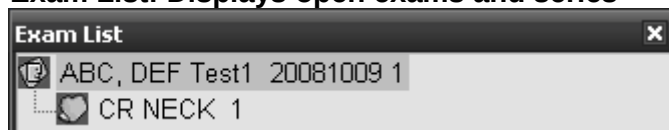
1. Menu List

File, Edit, View, Image Process, Annotation, Tool, W/L Preset, LUT Preset, Sharpen Preset, Option, Hanging Protocol and Macro
(See next page for detailed information on "Menu List".)

2. Selected Menu Icons



3. Exam List: Displays open exams and series

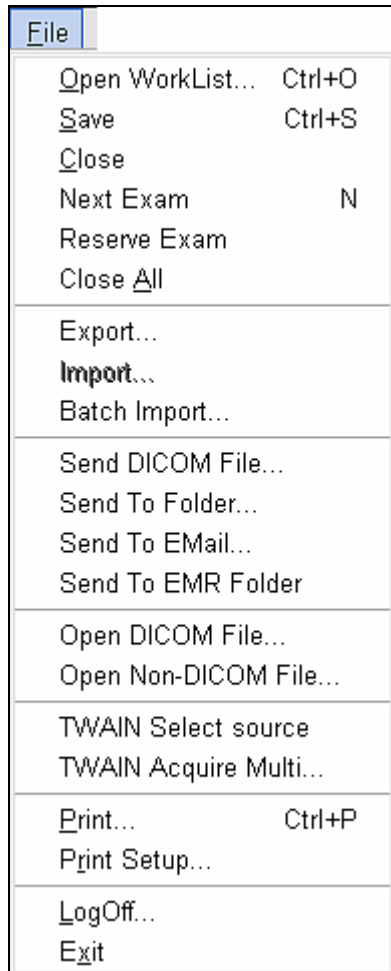


4. X-Ray Image

X-Ray image is displayed along with Patient & Exam information

1. Menu List

1.1 File



1. Open Worklist

To Open Worklist



- 1) Icon
- 2) Click **File** → **Open Worklist** OR **Ctrl+O**

2. Save

- 1) Click **File** → **Save** OR **Ctrl+S**

3. Close

To close current image that is on display

- 1) Icon 
- 2) Click **File** → **Close**

4. Next Exam

To close current exam and open next exam from Exam List

- 1) Icon 
- 2) Click **File** → **Next Exam** OR **N**

5. Reserve Exam

- 1) Click **File** → **Reserve Exam**

6. Close All

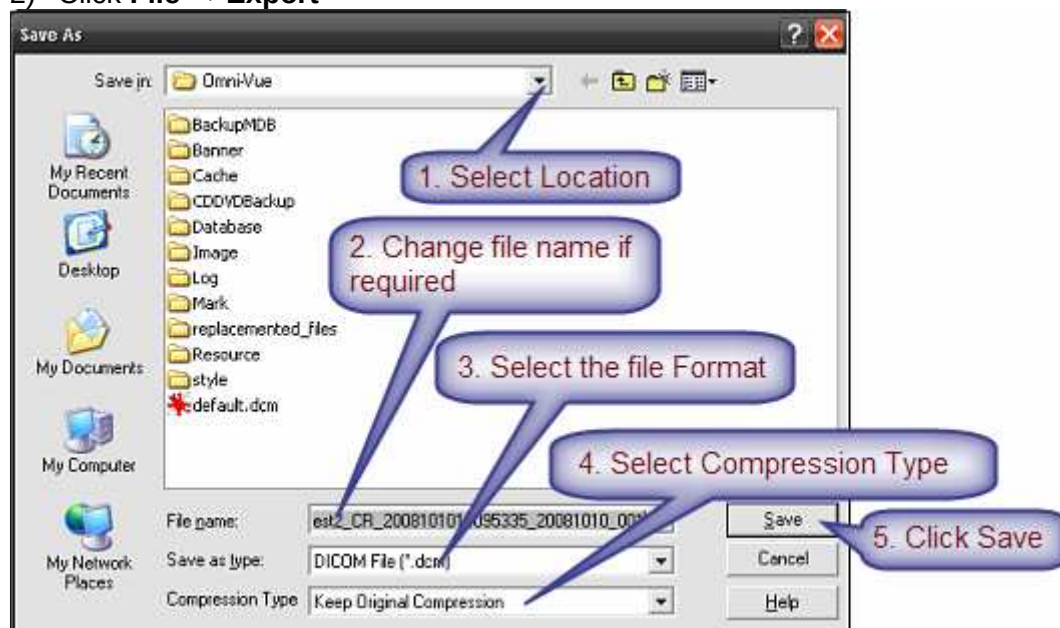
To close all exams on display

- 1) Click **File** → **Close All**

7. Export

Images can be saved as DICOM, JPEG, BMP or TIFF

- 1) Select Image by clicking once on the image
- 2) Click **File** → **Export**



8. Import

To Import Images to OmniVue

- 1) Open Image:
Click **File** → **Open DICOM File...** for importing DICOM images
Click **File** → **Open Non-DICOM File...** for importing Non-DICOM images



- 2) Click **File** → **Import**
Import...
- 3) If importing DICOM image/s verify the patient information in the import window
If importing Non-DICOM image/s, fill in the required information

- 4) For Non-DICOM image/s fill in the following information:

Database: Select Local or Conference Folder

Patient Information: Input patient information

Study Information: Input exam information

Series Information: Input series information

Applied Range: Select the image to be imported (Selected Images, All Images)

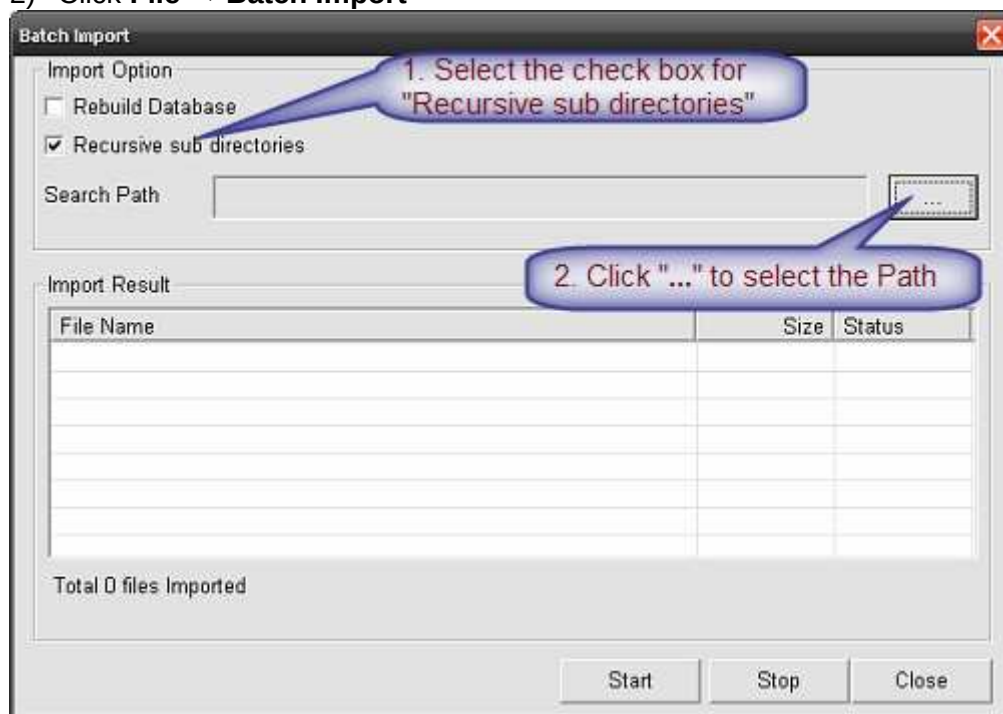
Window Level: After opening it in OMNIVUE and select preferred W/L (current or original Value)

- 5) Click **OK** to finish

9. Batch Import

This feature enables user to import multiple DICOM images in one step

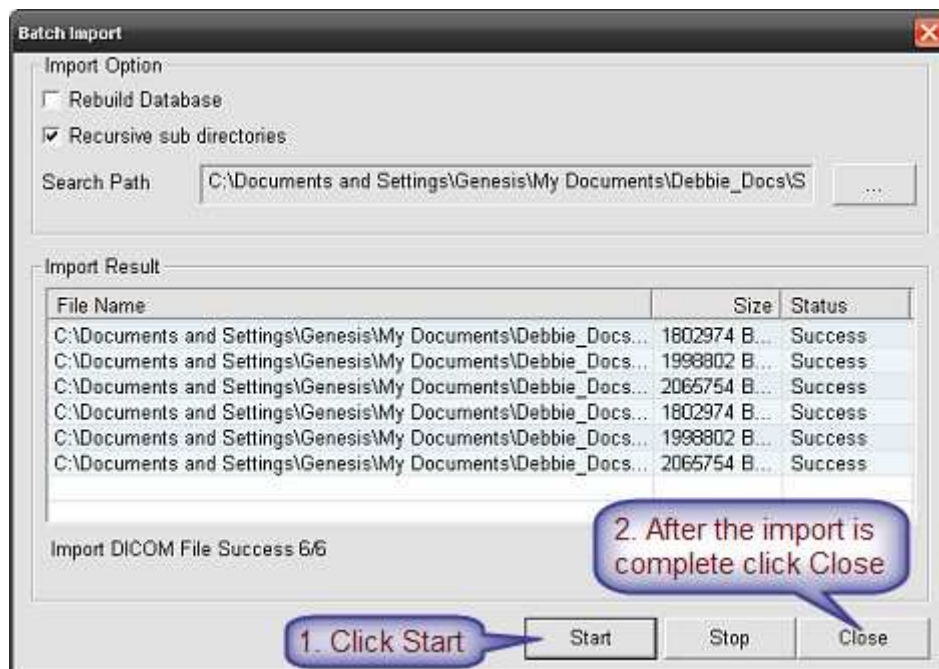
- 1) Save DICOM images in a folder and place it on your desktop or anyplace in the computer
- 2) Click **File** → **Batch Import**



- 3) Select the path for DICOM image folder & click **OK**



- 4) Click **Start**
 5) Wait for all images to be imported
 6) Click **Close**



- 7) Click on **Open** Icon to go to Worklist



- 8) Click on the **Exam List** Tab
 9) Click **Search** to refresh list and view newly imported exams

10. Send DICOM File...

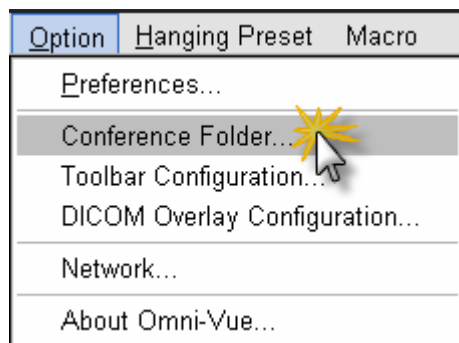
This feature is same as DICOM send feature from worklist window under exam list tab.
(Page 36)

11. Send To Folder...

OmniVue allows users to make personal database called conference folders which helps save space on local hard drive. With Conference Folder option, transferring & storing DICOM Images to/from local to external is made simpler. You can also open an image from an external folder in the same way you would open from local drive, eliminating local disk space limitations.

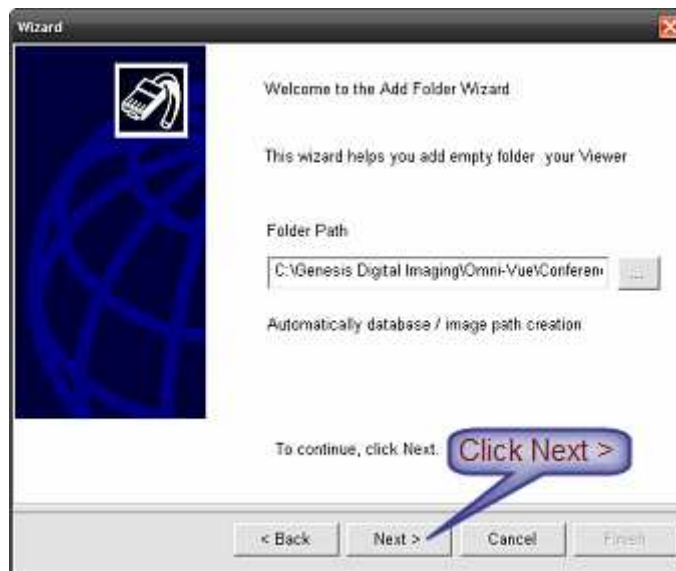
Step 1: Create Conference Folder

- 1) Go to **Option→Conference Folder...**



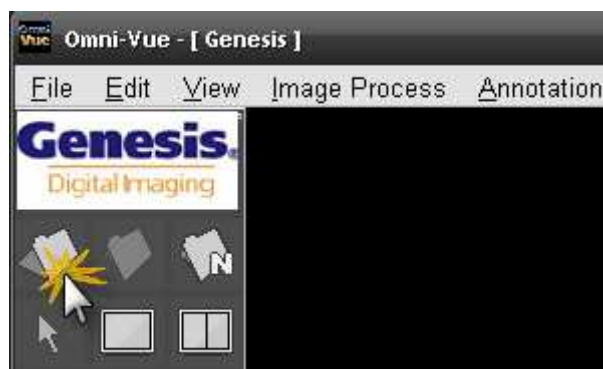
- 2) Fill in required information in the Wizard



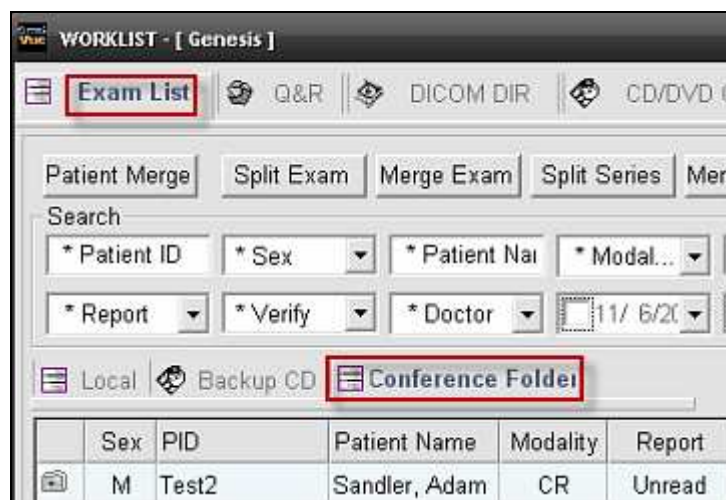




3) Click **Open** Icon to view Worklist

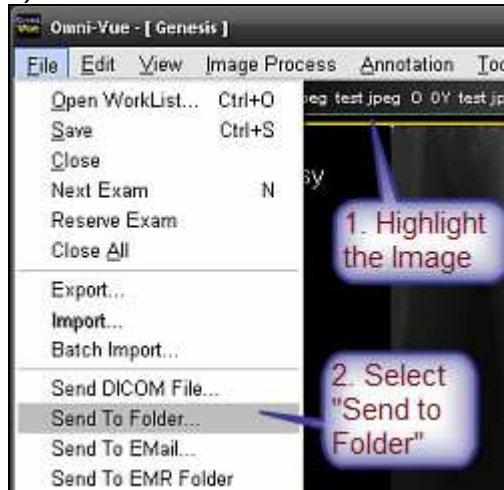


4) Conference Folder will display under Exam List, next to Local & Backup CD tabs

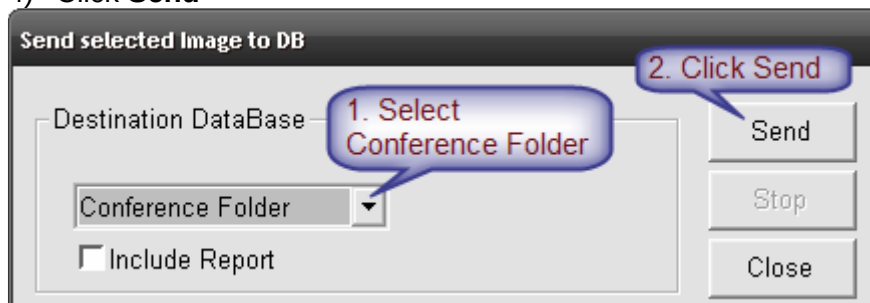


Step 2: Send images to Conference Folder

- 1) Select Image/s
- 2) Go to **File**→**Send to Folder**

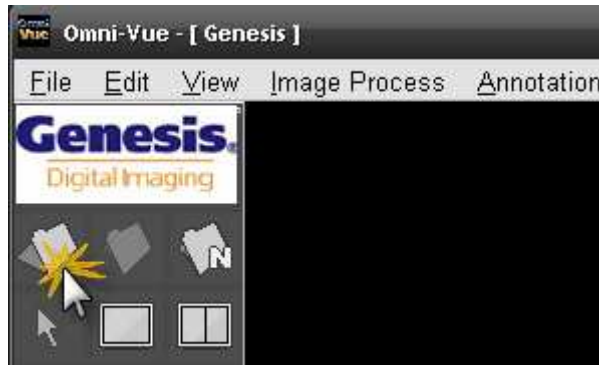


- 3) Select Conference Folder
- 4) Click **Send**

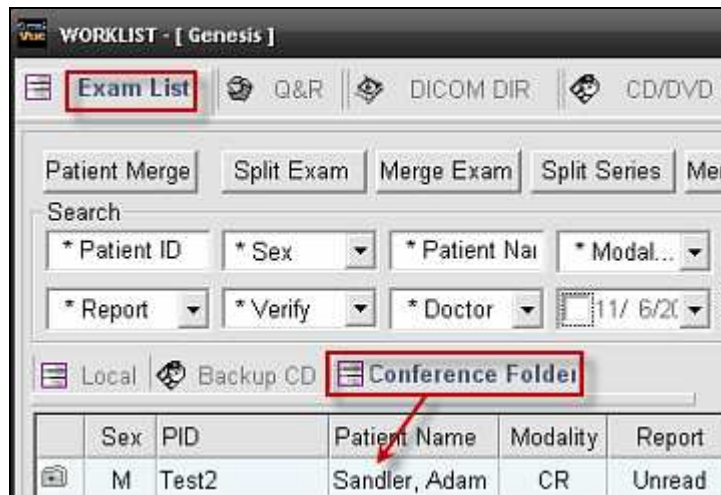


Step 3: View the Images sent to the Conference Folder

- 1) Click on the Open Icon to view Worklist



- 2) Under Exam List tab click **Conference Folder** to view the exam that was sent to the folder



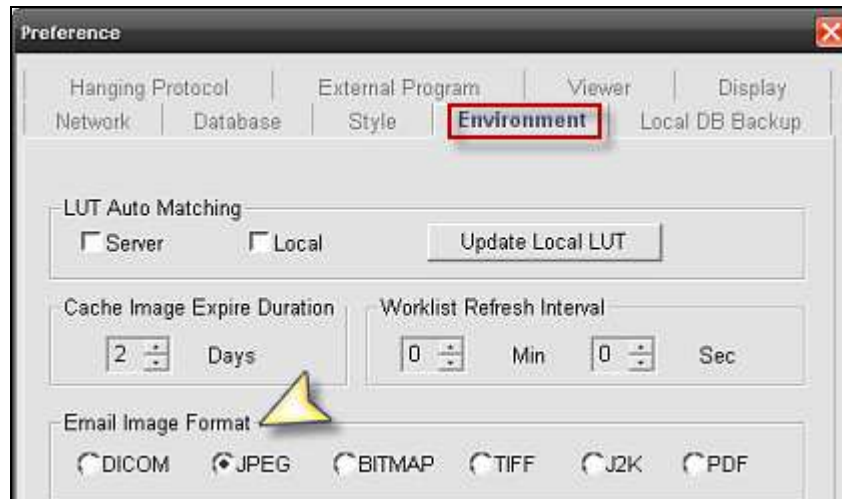
Note: You can send exams to the conference folder from Exam List as follows:

- Select Exam and Right-Click
- Click on "Send to Folder"
- Select Conference Folder & click Send
- Wait & click Close
- Click on the Conference Folder tab to view transferred images

12. Send To Email...

This feature allows users to email images, as one of six pre-selected formats (DICOM, JPG, BMP, TIF, J2K or PDF). This feature requires the presence of an email client (i.e. Mozilla Thunderbird or Outlook Express)

- 1) Configure Email Format:
Go to Option → Preference → Environment → email image format
- 2) Pre-Select default image type (DICOM, JPEG, BMP, TIFF, J2K or PDF)



- 3) Select image to be transmitted via e-mail. (select multiple images by pressing CTRL or SHIFT keys)
- 4) Click 'File -> Send to Email'



13. Open DICOM File

Refer to Page# 65 → Import

14. Open Non-DICOM File

Refer to Page# 65 → Import

15. Twain Select source

Twain Select source is used to select Twain driver.

External twain drivers are used to acquire film or paper images and control film digitizers.

How to Select Twain Driver

- 1) Go to **File**→**Twain Select source**
- 2) Select Twain Driver
- 3) Click Select

16. Twain Acquire Multi

This feature allows user to acquire film or paper images.

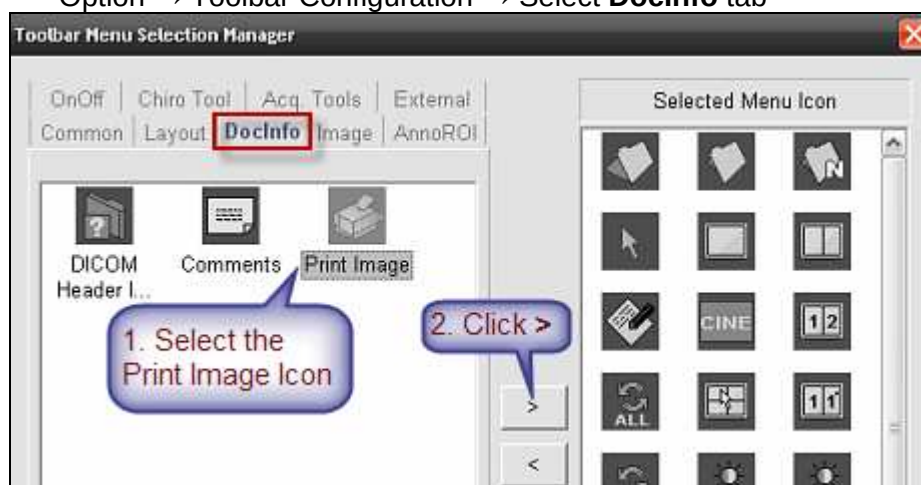
How to use Twain Driver

- 1) Insert film at the digitizer
- 2) Click **File**→**Twain Acquire Multi...**
- 3) Run External Twain Program
- 4) Scanned image is displayed on Display Window of OmniVue
- 5) Click **File**→**Import**
- 6) Type patient, study and series, etc.
- 7) Click **OK** to store it to the local database of OmniVue
- 8) You can find imported image in Worklist window of OmniVue

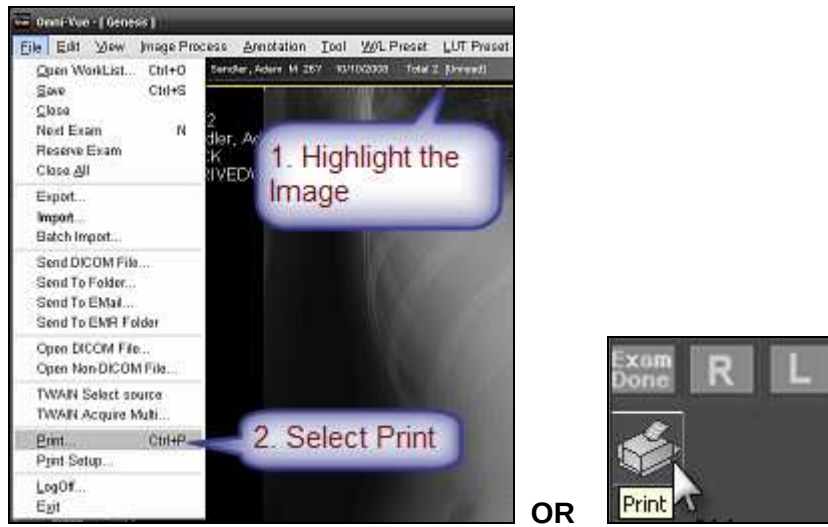
17. Print

This feature allows user to print images on a DICOM printer or a paper printer

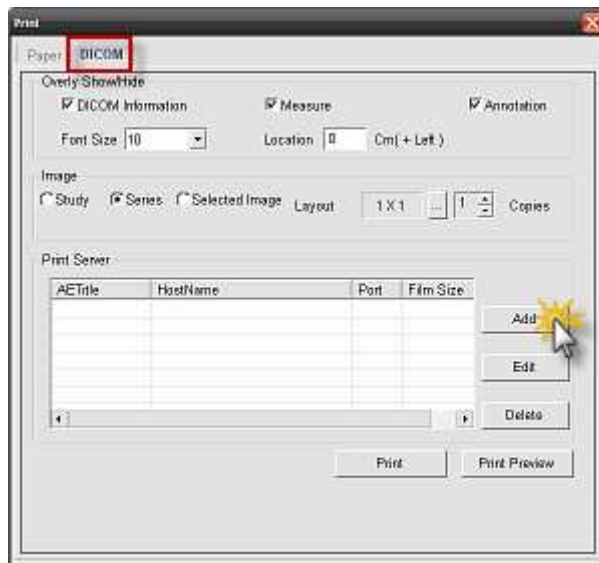
- 1) Add Printer Icon to the Selected Menu Icon list
Option → Toolbar Configuration → Select **DocInfo** tab



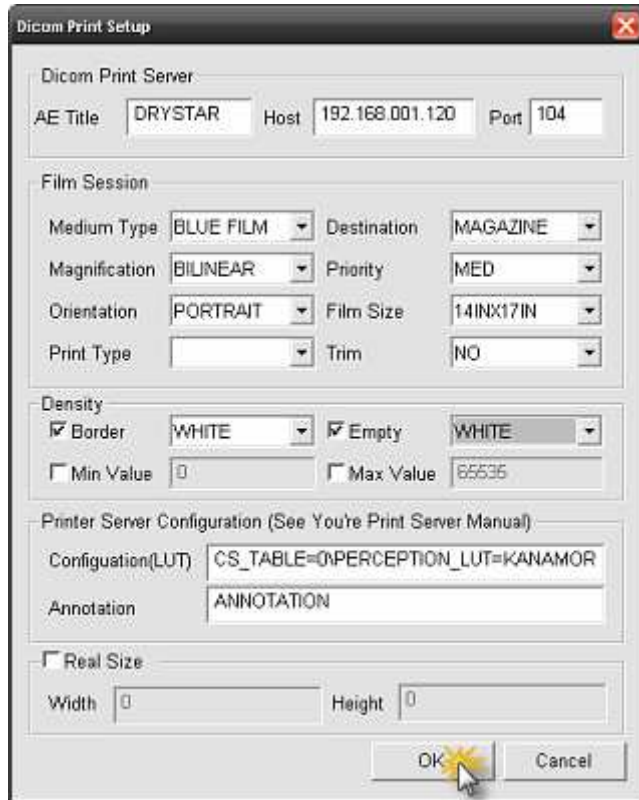
- 2) Highlight an image and Select File→Print **OR** click on the Print Icon **OR Ctrl+P**



- 3) Choose “DICOM” tab for DICOM Printer.
 4) The first time you print an image, you will have to add a printer.



- 5) Complete form with printer information. Consult printer manual, as this information will be specific to your printer. See below for an example. Click **OK** when done.

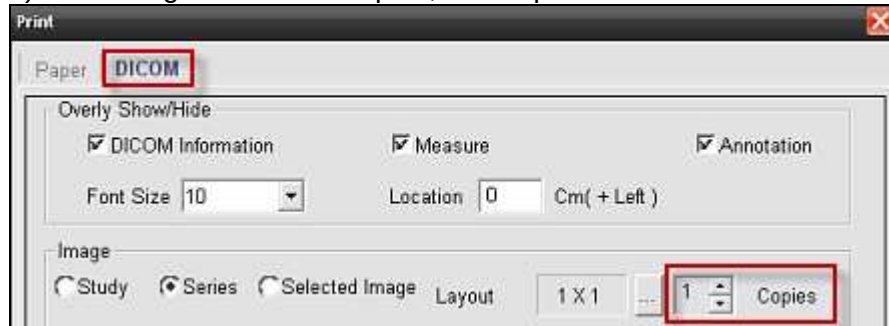


The Dicom Print Setup dialog box contains the following sections:

- Dicom Print Server:** AE Title: DRYSTAR, Host: 192.168.001.120, Port: 104
- Film Session:**
 - Medium Type: BLUE FILM, Destination: MAGAZINE
 - Magnification: BILINEAR, Priority: MED
 - Orientation: PORTRAIT, Film Size: 14INX17IN
 - Print Type: (empty), Trim: NO
- Density:**
 - ☒ Border: WHITE, ☒ Empty: WHITE
 - ☐ Min Value: 0, ☐ Max Value: 85535
- Printer Server Configuration (See Your Print Server Manual):**
 - Configuration(LUT): CS_TABLE=0, PERCEPTION_LUT=KANAMOR
 - Annotation: ANNOTATION
- Real Size:**
 - ☐ Real Size
 - Width: 0, Height: 0

Buttons: OK, Cancel

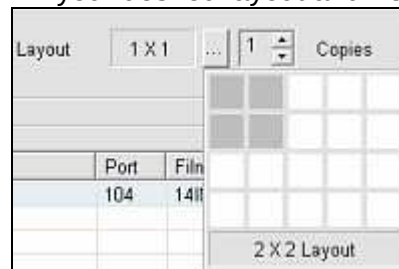
- 6) To change number of copies, Click up and down arrows next to “Copies.”



The Print dialog box contains the following sections:

- Paper:** DICOM
- Overlay Show/Hide:**
 - ☒ DICOM Information, ☒ Measure, ☒ Annotation
 - Font Size: 10, Location: 0 Cm(+ Left)
- Image:**
 - ☐ Study, ☒ Series, ☐ Selected Image
 - Layout: 1 X 1, **1** Copies

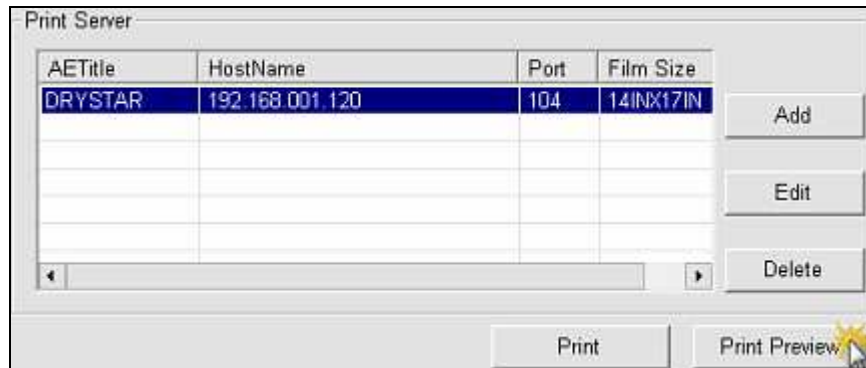
- 7) To change the print layout format, click on the “...” button and drag the arrow to your desired layout and **Left-click** once.



The Layout selection dialog box shows the following options:

- Layout: 1 X 1, ... button, 1 Copies
- Grid view showing a 2 X 2 Layout option.
- Table with columns Port and Film, showing values 104 and 14IN.

8) Select a printer from the list of all available printers and click **Print Preview** to view selected layout



9) Click **Print** to print out image/s.

Note: To use a paper printer, click on Paper tab in the Print window. You may use any printer associated with the workstation.



18. Print Setup

This option displays the standard Print Setup dialog. You can choose a printer and select other options. This is used to print images in Paper.

19. Logoff

In order to re-start OmniVue (to update) user must logoff first (Click **File**→**Logoff**) and login

20. Exit

Click **File**→**Exit** when you want to close OmniVue

1.2 Edit



1. Delete Selected Images

This feature allows user to delete images that are highlighted from the Display Window

- 1) Select Image/s
- 2) Click **File** → **Delete Selected Images**

2. Delete Unselected Images

This feature allows user to delete images from the Display Window that are not highlighted

- 1) Select Image/s that do not have to be deleted
- 2) Click **File** → **Delete Unselected Images**

3. Undo Deleted Images

This feature allows user to retrieve the last set of images deleted

- 1) Click **File** → **Undo Deleted Images**

4. Hide Selected Images

This feature allows user to temporarily hide images in the Display Window

- 1) Select Image/s
- 2) Click **File** → **Hide Selected Images**

5. Show Hidden Images

This feature allows user to view the images that were hidden

- 1) Click **File** → **Show Hidden Images**

6. Copy to Clipboard

OmniVue supports image-editing function for documentation. You may capture the whole image by copying to clipboard or a piece of image by **Region Of Interest (ROI)**

To copy an entire image

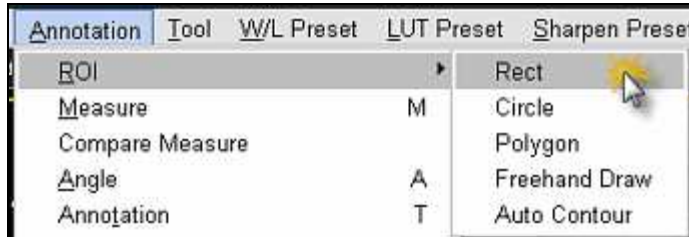
- 1) Select Image/s
- 2) Click **File** → **Copy to Clipboard**



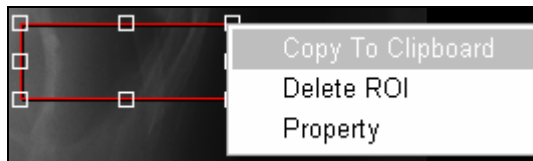
- 3) Right-click and select **PASTE** or **Ctrl+V** to paste the image on any document

To copy a part of an image

- 1) Go to Annotation→ROI→Rect (for rectangular selection of an Area)



- 2) Select the area on the image
- 3) Right-click on the edge of ROI.
- 4) Select Copy To Clipboard



- 4) Right-click and select **PASTE** or **Ctrl+V** to paste the image on any document

7. Overlay Delete All

This feature allows users to delete all annotation on an image.

- 1) Select image with Annotations
- 2) Click **Edit** → **Overlay Delete All**

8. Select All

“Select All” will highlight all the images associated the Exam.

- 3) Click **Edit** → **Select All** OR **Ctrl+A**

9. Deselect All

“Deselect All” will deselect all the images that were selected.

- 1) Click **Edit** → **Deselect All** OR **Ctrl+E**

1.3 View



1. Auto Close

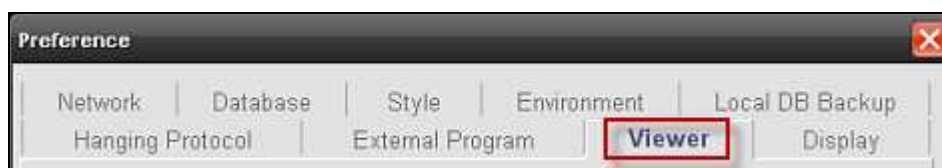
This function can be selected to automatically close an exam with one of the following options:

- Do not save and close: Closes exam without saving any changes
- Save and close: Closes exam and saves any changes
- Confirmed save exam: Prompts user prior to closing exam

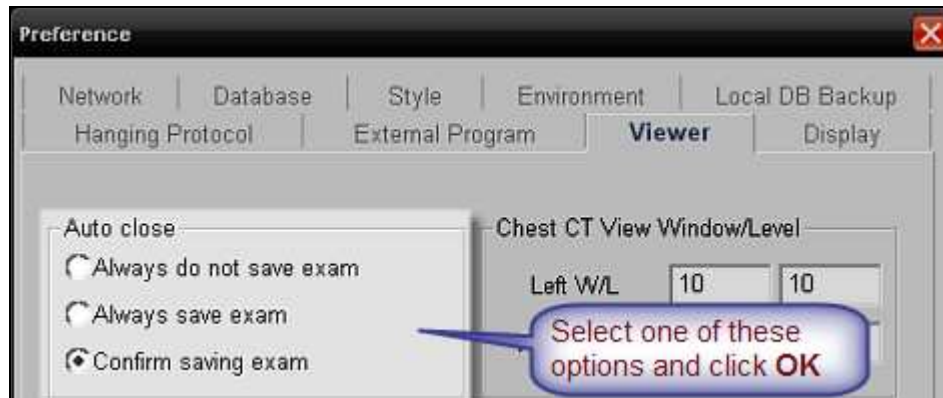
1) Go to Option→Preferences



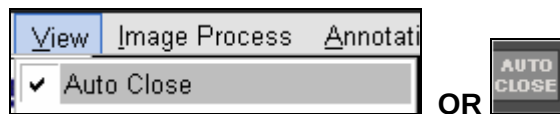
2) Click on the **Viewer** tab



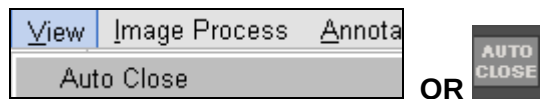
- 3) Select one of the options under Auto close and click **OK**



- 4) Go to View→ Select Auto Close **OR** click Auto Close icon.



- 5) To Deselect “Auto Close” Go to View→Auto Close **OR** click on the Auto Close icon again



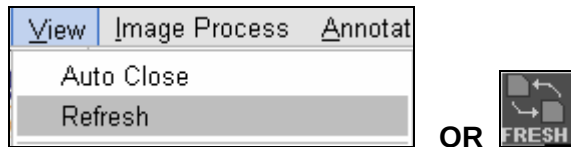
2. Refresh

This feature allows user to remove all the annotations made on the image prior to being saved.

- 1) An image with annotations has to be cleared



- 2) Go to View→Refresh **OR** click on the Refresh Exam icon

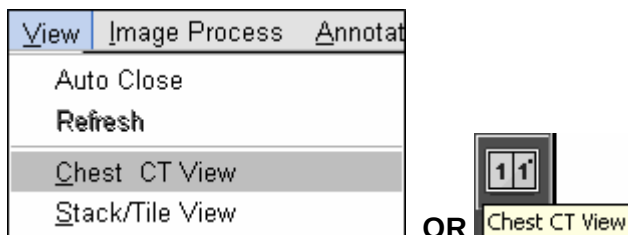


- 3) This will remove the annotations made on the image

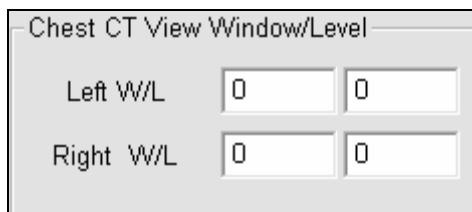


3. Chest CT View

- 1) Open a CT exam from the Exam List
2) Go to View→Chest CT View **OR** click on the icon for Chest CT View



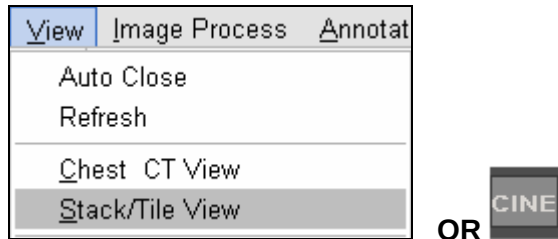
- 3) After one image displays on each window, preset Window Level as normal to compare and search.
4) Go to Option→Preferences
5) Click on the **Viewer** tab
6) Setup value of Window Level Preset under the section "Chest CT View Window/Level"



4. Stack/Tile View (Cine)

This features allows users to view multiple images of an exam in a sequence

- 1) Open an exam with multiple images from the Exam List
- 2) Go to View→Stack/Tile View **OR** click on the icon for Stack/Tile



OR

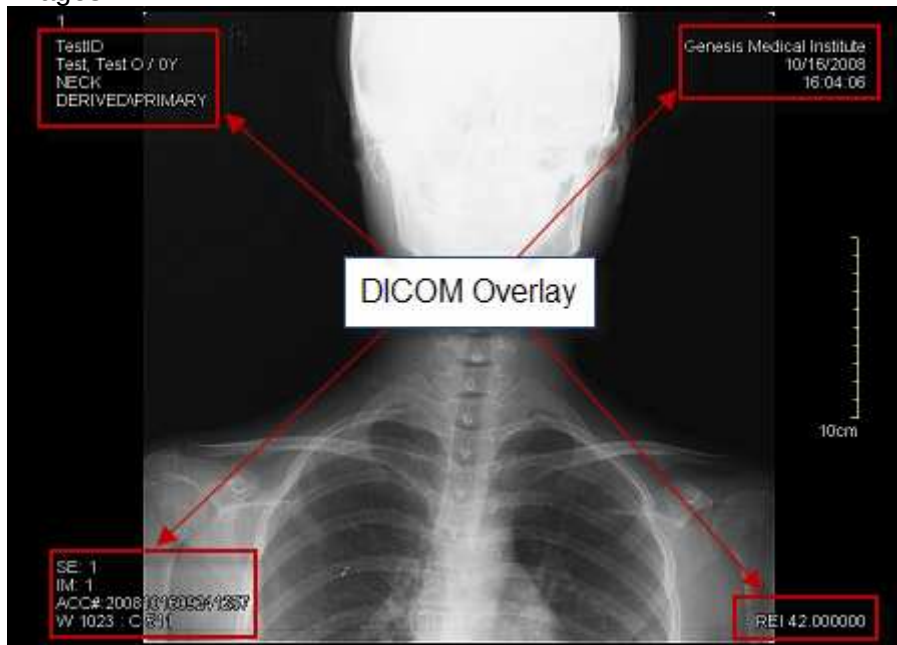
- 3) Use the slideshow controls to autoplay the images



- 4) To remove the controls from the screen, go to View→Stack/Tile View **OR** click on the icon for Stack/Tile

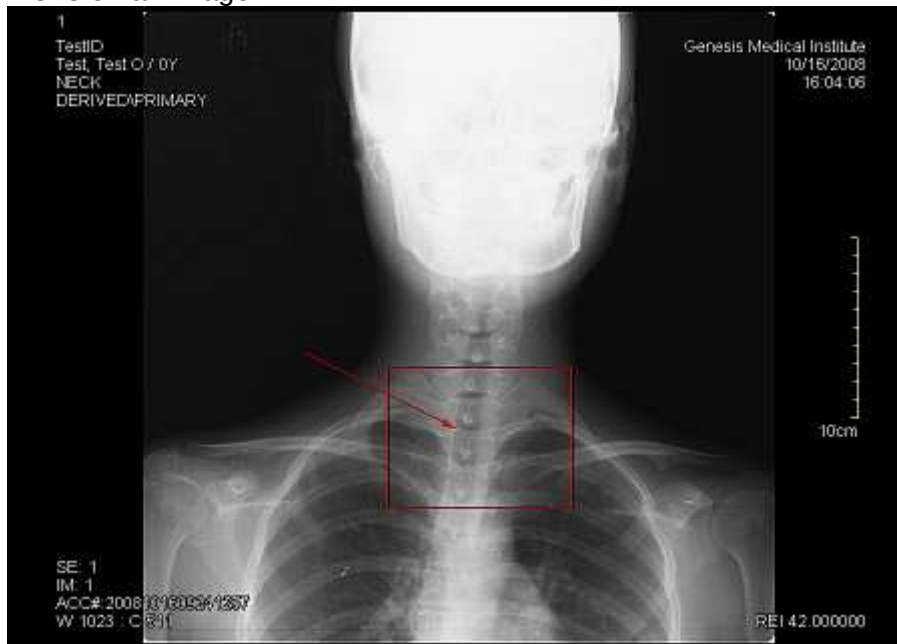
5. DICOM Overlay Show/Hide

DICOM Overlay Show/Hide feature allows user to display or hide DICOM information on the images.



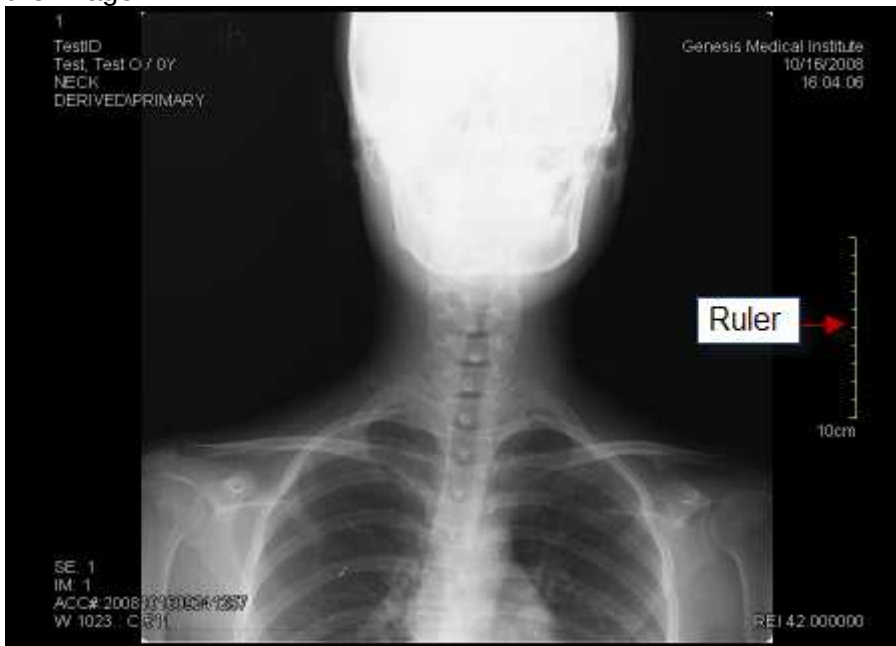
6. ROI/Annotation Show/Hide

ROI/Annotation Show/Hide features allows user to display or hide the annotations and ROI's on an image.



7. Ruler Show/Hide

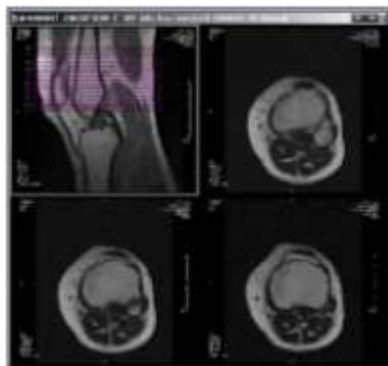
Ruler Show/Hide feature allows user to display or hide the measurement tool displayed on the image.



8. Set Scout Image

This feature allows user to set an MR or CT scan image as a scout image

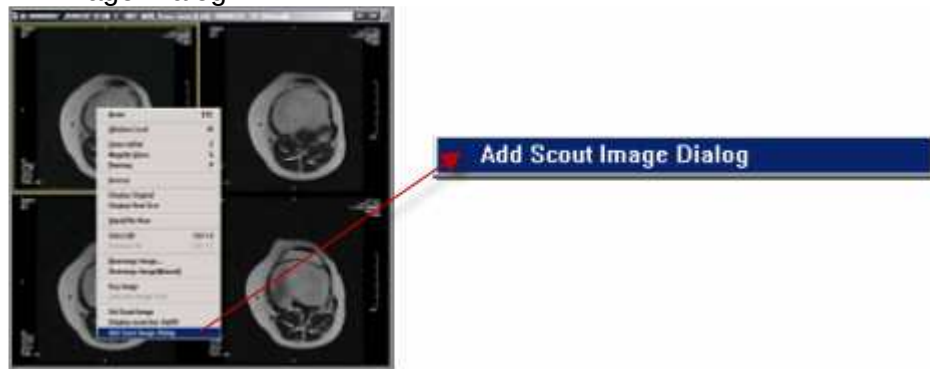
- 1) Go to View→Set Scout Image, this will set the first image as the scout image



9. Add Scout Image

There are two way to display scout line. User may select "Hanging protocol" or "Add scout image"

- 1) Right-click on the image and then select Scout Image and click 'Add Scout Image Dialog'



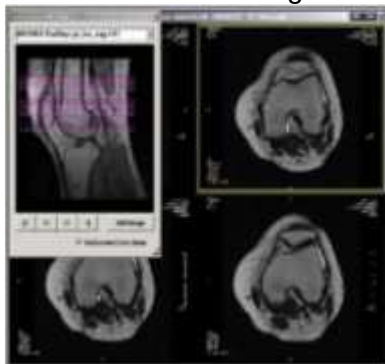
- 2) Display the image on scout image.



- 3) When checked "UnSelected Line Draw" scout line will be displayed.

☐ **UnSelected Line Draw**

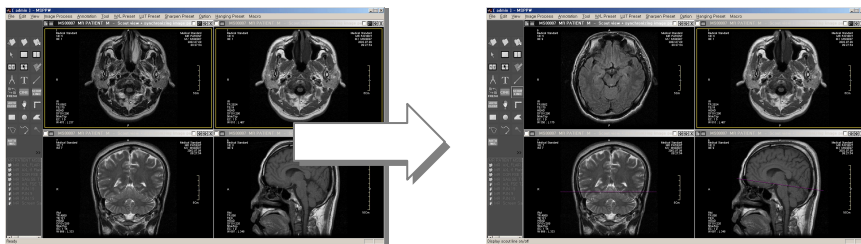
- 4) In Display Window, if you click on the image, the scout line will be displayed as a solid line in Add scout image dialog.



- 5) In Add scout image dialog, if you click the Scout Line, the image will be selected in Display Window. Click Add Image and scout image will be saved in Series.

10. Scout On/Off button

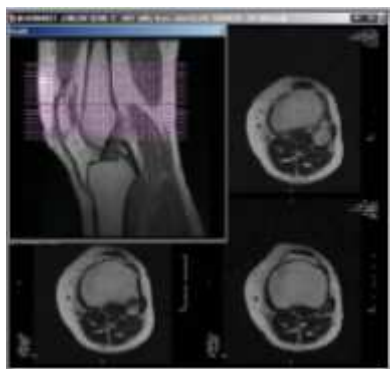
If user sets hanging protocol for MR or CT exams, and if series layout is selected as multi series, each time you click one image, scout line will be drawn on other series which is crossed direction.



- 1) Go to View→Display Scout Line On/Off **OR** click on the Icon

11. Popup Scout Image...

- 1) Go to View→Popup Scout Image..., to display Scout Image as popup window.

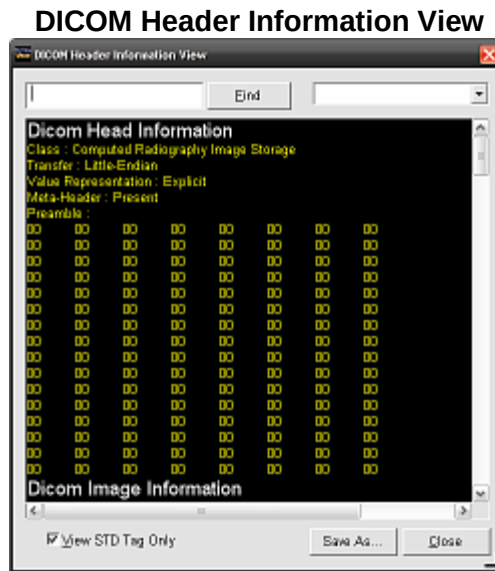


12. DICOM Header

This function displays DICOM header information

- 1) Go to View→DICOM Header **OR** click on the Icon





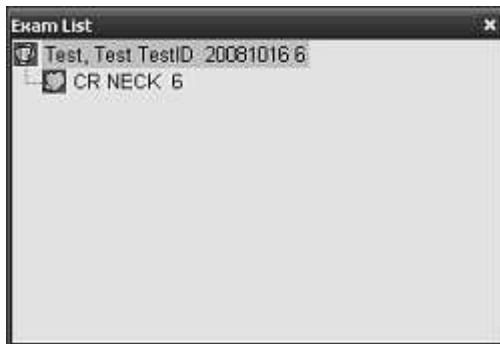
13. Floating Exam List

Floating exam list displays an Exam List window that has a list of exams on display

- 1) Go to View→Floating Exam List **OR** click on the Icon



Exam List Window



14. Toolbar

This option allows user to show or Hide the Toolbar

- 1) Go to **View→Toolbar** OR **Ctrl+B**

15. Caption

This option allows user to show or Hide the Caption

- 1) Go to **View→Caption**

16. Status Bar

This option allows user to show or hide the Status Bar

- 1) Go to **View→Caption**



17. Full Screen

This option allows user to view the image in full screen. When selected, Caption/Toolbar/Status and Menu bars are no longer displayed:

- 1) Go to **View→Full Screen** OR **Ctrl+F**
- 2) To undo full screen do **Ctrl+F**

18. Reset Window Position

- 1) Go to **View→Reset Window Position**

1.4 Image Process

Image Process

▲	
<u>A</u> rrow	ESC
MouseStack	
<u>Z</u> oom In/Out	Z
Magnify <u>G</u> lass	G
<u>P</u> anning	P
Mask Enabled/Disabled	
Mask Settings	
Cobb's angle	
Off-center adjustment Cobb's angle	
Center mass	
Atlas plane line	
Extended Cobb's Angle	
New Cobb's Angle	
Ratio Line	
Measure from Horizontal Line	
Slippage	
3 Line Percentage	
Flex and Expansion	
<u>W</u> indow Level	W
All Window Level	
Auto Leveling	
<u>I</u> nverse	
Display Original	
Display All Original	
Manual Real Size Setting...	
Manual Real Size Mode	
Display Manual Real Size	
Flip <u>H</u> orizontal	
Flip <u>V</u> ertical	
Rotate CW	
Rotate CCW	
Arbitrary Rotate...	
Rectangle ROI Image Processing	
Circle ROI Image Processing	
▼	

1. Arrow

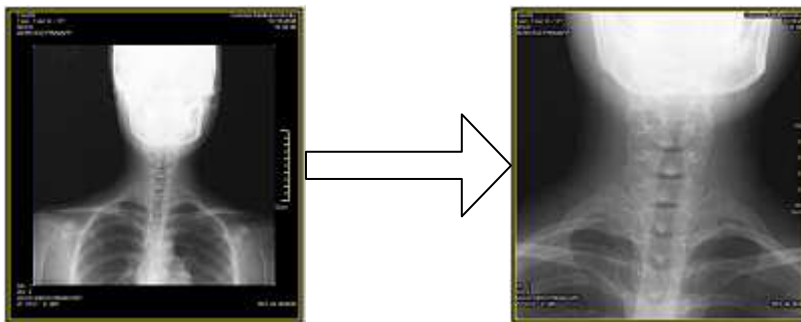
Click Arrow icon to change to general cursor mode.

2. MouseStack

Selecting MouseStack under Image Process drop-down menu changes the Cursor from Arrow to a MouseStack.

3. Zoom In/Out

After clicking Zoom button, click and drag the image to desired size. In case of multiple images, select all (Ctrl + A) and Zoom in/out all the images. (Short-cut key: Z).

**4. Magnify Glass**

Shift + Mouse Drag: To adjust the size of magnifying glass

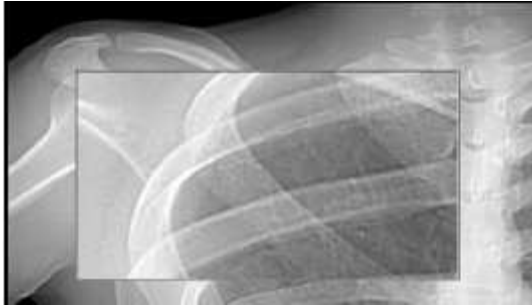
Ctrl + Mouse Drag: To Zoom within the glass

Alt + Mouse Drag: To Adjust W/L within the glass (any adjustment will apply to the entire image)

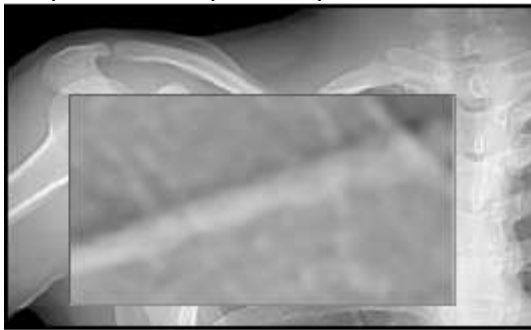
- 1) Click on the Magnify Glass icon **OR** G on the keyboard
- 2) To magnify a part of an image, Left-click on the Image
- 3) The magnifying glass will appear as shown below



- 4) To change the size of the magnifying glass, hold Shift, click and drag the mouse to the desired size.



- 5) To zoom within the magnifying glass, hold Control, click and drag up (zoom out) and down (zoom in).



5. Panning



Panning allows user to move the image within the frame. After selecting the function, click on the image and drag to move. (Short-cut key: P)

6. Mask Enabled/Disabled



Mask Filter Enabled



Mask Filter Disabled



7. Mask Settings



- 1) Select Mask Settings icon and click once on the Image
- 2) The following Mask Settings window will be displayed

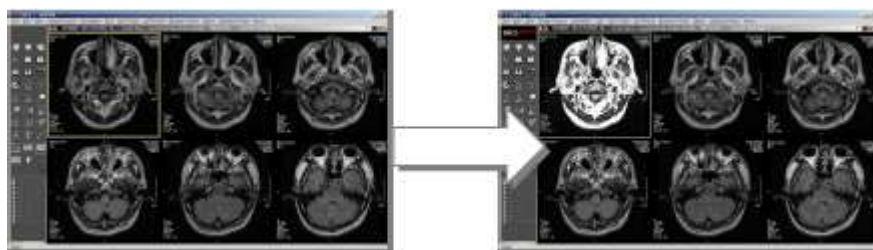


- 3) After selecting desired Mask Settings, click **Apply** & close the window

8. Window Level



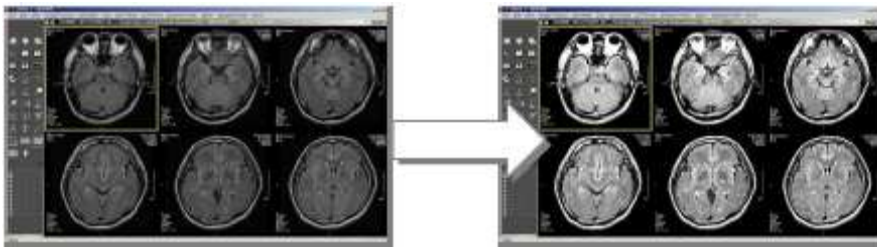
- 1) Click Image Process→Window Level **OR** on the W/L icon **OR** W on the keyboard
- 2) Cursor will be changed to W/L. Click the image and drag mouse left/right for contrast adjustment and up/down for brightness adjustment. Window level value will be changed.



9. All Window Level



- 1) Click Image Process→All Window Level **OR** on the **ALL** icon
- 2) Click on one image and drag mouse left/right for contrast adjustment and up/down for brightness adjustment. All adjustments are applied to all images in the exam.

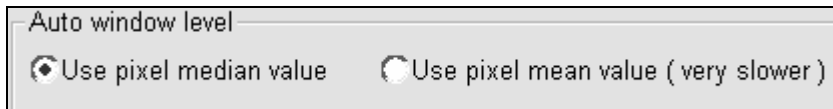


10. Auto Leveling



Apply automatic window width/level using median value or mean value.

- 1) Click Option→Preferences
- 2) Click on the Viewer Tab
- 3) Select **median value** or **mean value**
- 4) Click **OK**



- 5) Go to Image Process→Auto Leveling **OR** click on Auto W/L Icon



11. Inverse



- 1) Right-click on image & click Inverse **OR** click on the icon



12. Display Original



- 1) Go to Image Process→Display Original **OR** click the icon

- 2) This function will return the selected image to its original setting prior to any modification.

13. Display All Original

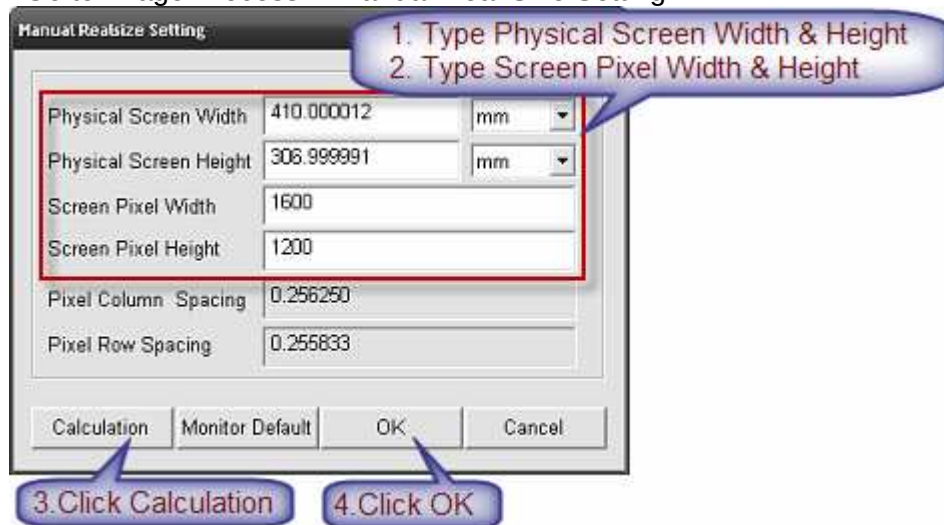


- 1) Go to Image Process → Display All Original **OR** click the icon
- 2) This function will return all the images to their original setting prior to any modification

14. Manual Real Size Setting

This feature is used to view the actual size of the image

- 1) Go to Image Process → Manual Real Size Setting



15. Manual Real Size Mode

Select this option to View all exams at Real Size

- 1) Go to Image Process → Manual Real Size Mode

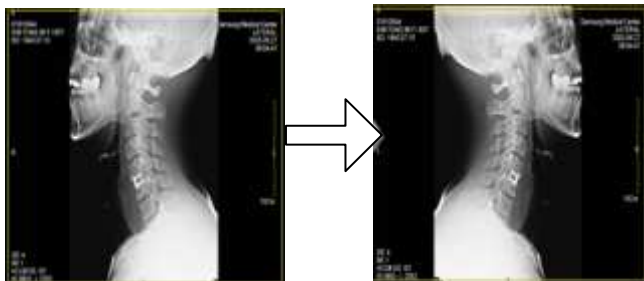
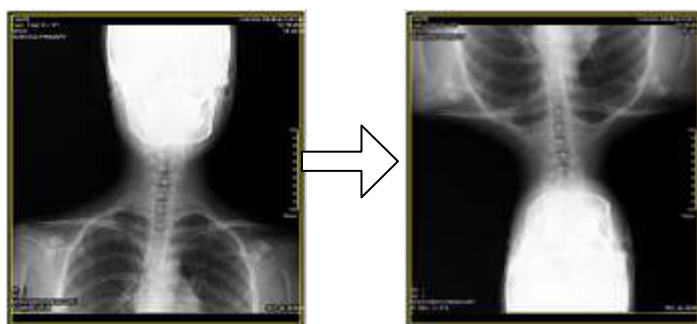
16. Display Manual Real Size

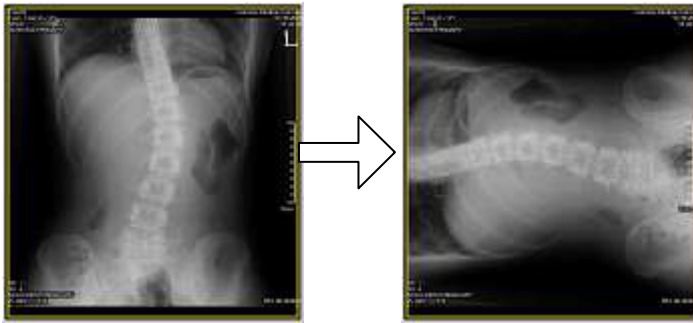
Select this option to View current exam at Real Size

- 1) Select Exam
- 2) Go to Image Process → Display Manual Real Size

17. Flip Horizontal



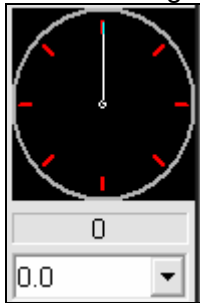
**18. Flip Vertical****19. Rotate CW****20. Rotate CCW**



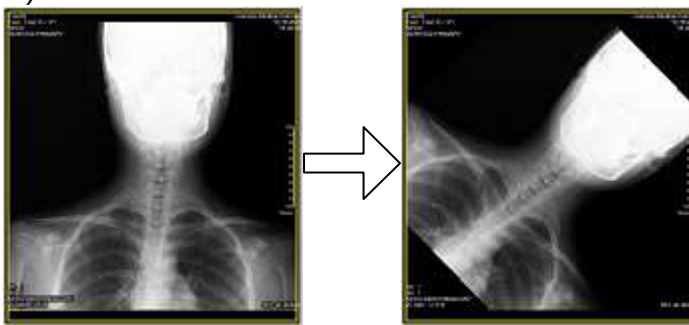
21. Arbitrary Rotate

This feature allows user to rotate an image by arbitrary degree.

- 1) Go to Image Process→Arbitrary Rotate.
- 2) The following image will appear in the upper right hand corner of the image.



- 3) Click the line and move clockwise or counterclockwise or use the drop-down list to select a pre-set value.
- 4) Click **Save**



22. Rectangle ROI





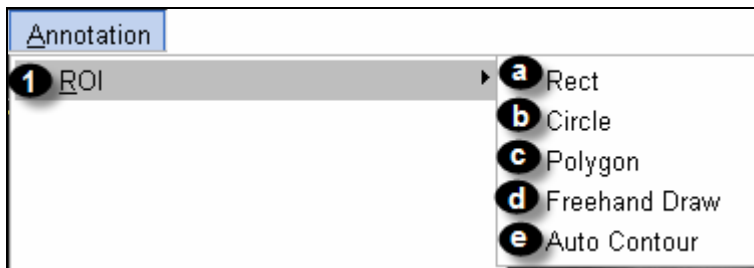
23. Circle ROI Image



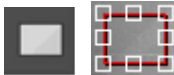
1.5 Annotation

Annotation		
1	ROI	▶
2	Measure	M
3	Compare Measure	
4	Angle	A
5	Annotation	T
6	Arrow Line	
7	Freehand Line	
8	Pseudo Color	
9	Picking	K
10	Profile	
11	Pixel View	L
12	Chest CT Ratio (Heart size of CR)	

1. ROI



a) Rect (rectangular)



- Click on the Rectangle Icon **OR** Go to Annotation→ROI→Rect
- Left-Click and drag on the required region
- For available ROI options: Right-Click on one of the ROI points to see the Menu



- 1) Copy to Clipboard: Copy selected ROI part and paste to any external software which supports the feature.
- 2) Delete ROI: Delete selected ROI
- 3) Property: Provides the dimension, position, size, pixel spacing & mean values

b) Circle



c) Polygon



d) Freehand Draw



e) Auto Contour

Auto Contour allows user to auto select a region on an image

**2. Measure**

Measure Tool (Short-cut key: **M**)

- 1) Length measurement: Anchor and drag the mouse to measure the length of a subject on an image.



3. Compare Measure



To measure different lengths from one point, click Tool ROI Compare Measure

- 1) Anchor and drag the mouse to draw the line
- 2) Two perpendicular lines will be displayed
- 3) Drag to adjust and measure.



4. Angle

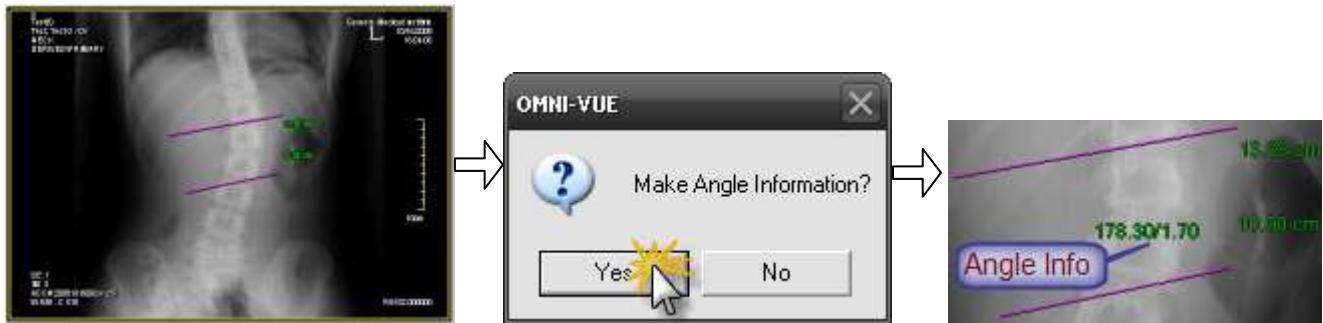


To measure angle/s (Short-cut key: **A**)

- 1) To measure an angle click on the first point (A), drag and click on the end points (B & C)

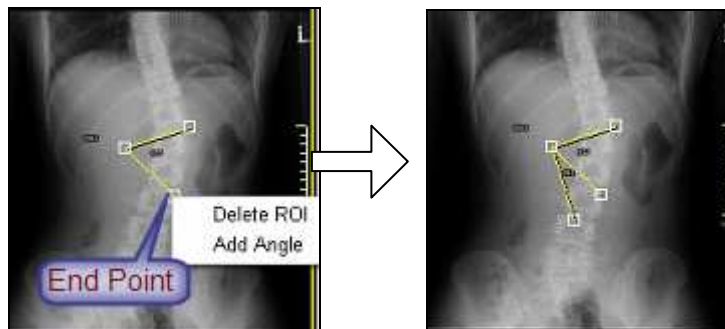


- 2) To measure the angle when lines that don't cross
 - Draw the lines for angle measurement using the Measure Tool (M)
 - Select the two lines: Press **Shift** button and click the lines
 - The 'Make Angle Information' message will be displayed
 - Click Yes to display the angle measurement
 - The angle measurement will display between the two lines



3) **Add angles:** Multiple angles can be measured from one point

- Click 'Angle' and select an end point
- Right-click to select 'Add Angle'
- Hold the end point and drag, another angle will be created
- It is possible to create multiple angles by same method(Hold the short-cut key 'D' and drag end points to create multiple angles)



5. Annotation



Annotation feature allows user to input text information on the image (Short-cut key: **T**)



6. Arrow Line

Click and drag from point A to Point B



7. Freehand Line



8. Pseudo Color

This feature allows user to mask a gray-scale image with user selected color
Check the distribution by window level appointment. Pseudo color function is not supported for color images.

- 1) Click 'Annotation->Pseudo Color' to activate
- 2) In the Pseudo Color Window, select color to overlay image from the drop-down list under Palette
- 3) Select the check box for "Use Color Mask" and select color to overlay range of W/L
- 4) Adjust width of bar by moving it up/down to check W/L of image
- 5) Click **OK** to apply on image.



9. Picking

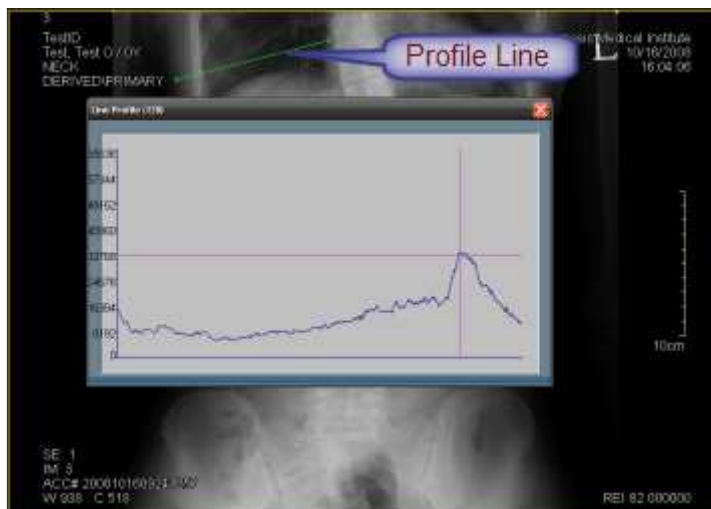
This feature is similar to Pseudo color. It overlays color which is in range of W/L (Shortcut Key: **K**)

- 1) Click Annotation→Picking to activate
- 2) Click the portion to be checked by Picking to overlay color.



10. Profile

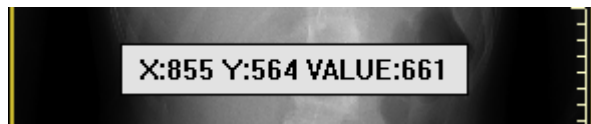
Annotation→Profile



11. Pixel View

Displays pixel value and coordinates of region selected (Short-cut key: **L**)

- 1) Click on the icon and move your mouse over the image
- 2) Hounsfield Unit will be displayed



12. Chest CT Ratio (Heart size of CR)

This Annotation is used to measure Heart Size.

Go to Annotation→Chest CT Ratio (Heart size of CR)

1.6 Tool



1. Report



OR Tool→Report **OR** shortcut key R

[Refer to Page# 44 → Report](#)

2. Comments



Comments can be used as a notepad to make notes on the exam

- 1) Click on the Comments icon **OR** Go to Tool→Comments

- 2) Enter notes & click **OK**



- 3) Go to File→Save **OR** Ctrl+S to save comments

3. Merge Patient

Refer to Page# 24 → Merge Patient

4. Merge Exam

Refer to Page# 28 → Merge Exam

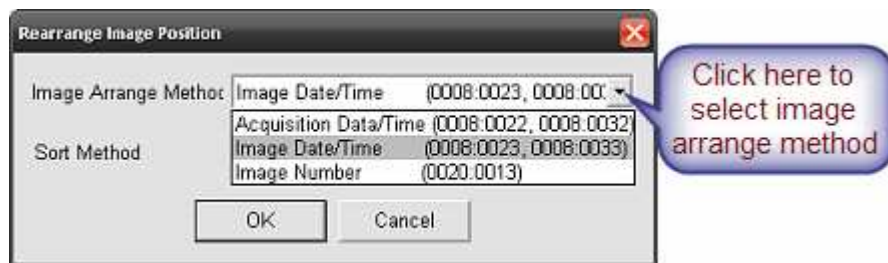
5. Merge to One Series

Refer to Page# 33 → Merge Series

6. Rearrange Image

This feature allows user to auto rearrange images by Date/Time, Image Date/Time or Image Number

- 1) Right-Click on any one Image & select “Rearrange Image...” **OR** Go to Tool→Rearrange Image
- 2) Select the Image Arrange Method

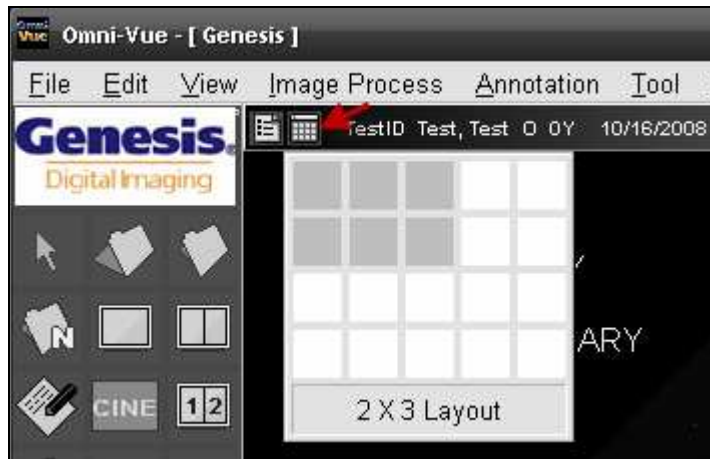


- 3) Select Sort Method & click **OK**



7. Rearrange Image Manually

- 1) Arrange the Series layout in a way that all images are viewable on one screen (Click on the Image Layout Icon on the top of the image and drag it)



- 2) Right-Click on any one image & select “Rearrange Image Manually” **OR** go to Tool→Rearrange Image Manually to change the mode to rearrange Image. The border around the selected image will change to blue.



- 3) Click the image to change with green color



- 4) To insert an image between two others, move the cursor to the space, cursor will change to a white bar
 5) Left-click once to insert

To switch the location with another image:

- 1) Move cursor over the image, with which you wish to switch, the border will change to red
- 2) Left-click once to switch the location

Note: To exit the Rearrange Image Mode:

Right-Click on any one Image & select “Rearrange Image Manually” **OR** go to Tool→Rearrange Image Manually

8. Select Spine Image

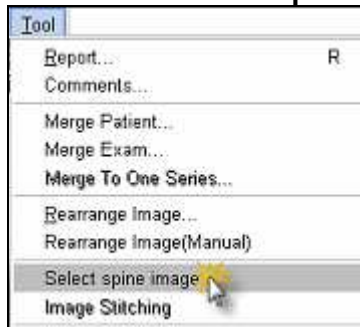
“Select Spine Image” is part of the image stitching process. Refer to Image Stitching below for complete process.

9. Image Stitching

- 1) Open series from worklist
- 2) Change display setting to show all images in series



- 3) Go to **Tool→Select Spine Image**

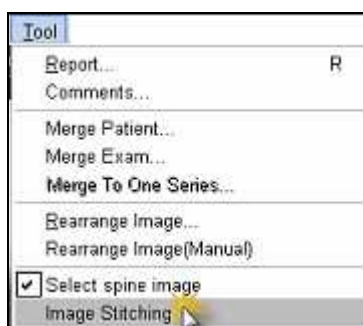


- 4) Select image in the order you wish to stitch. As you click on the image the following message will be displayed with corresponding order number

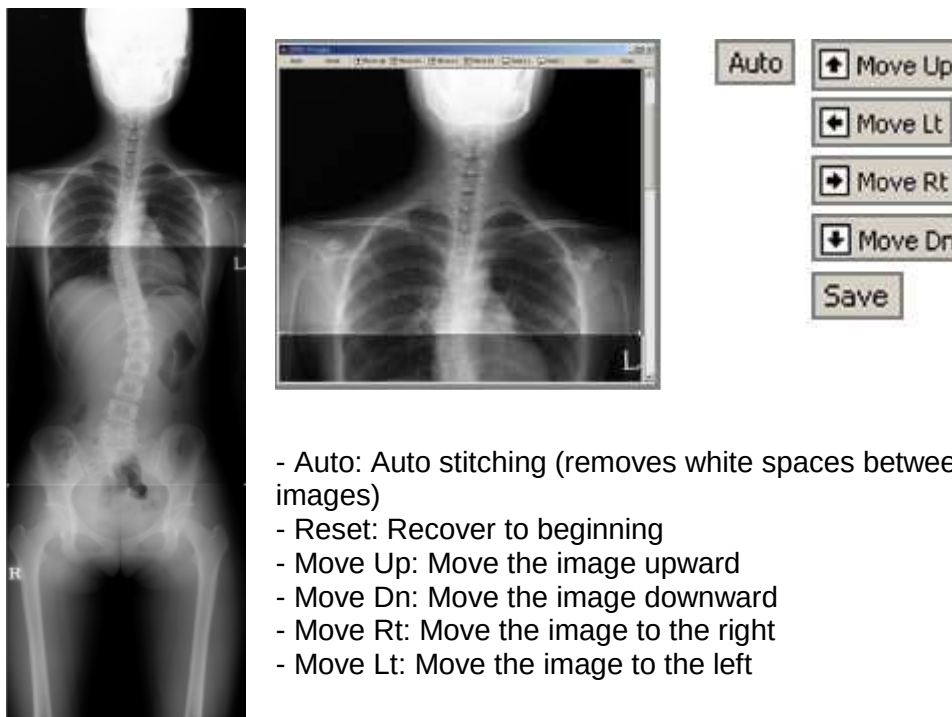
Whole spine merge order : 1



- 5) Go to **Tool**→**Image Stitching**



- 6) Adjust image using following menu



7) Click Save & Close



8) Stitched image will be added to the series



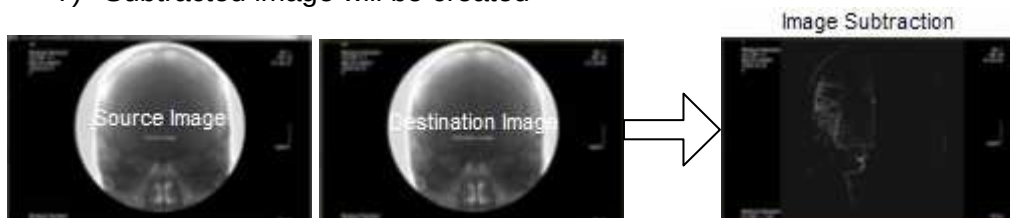
10. Select Source/Destination Image

“Select Source/Destination Image” is part of the image subtraction & addition processes. Refer to Image Subtraction & Image Addition below for complete process.

11. Image Subtraction

This feature subtracts the pixel value of one (second) image from another (first) of identical size to create a third image.

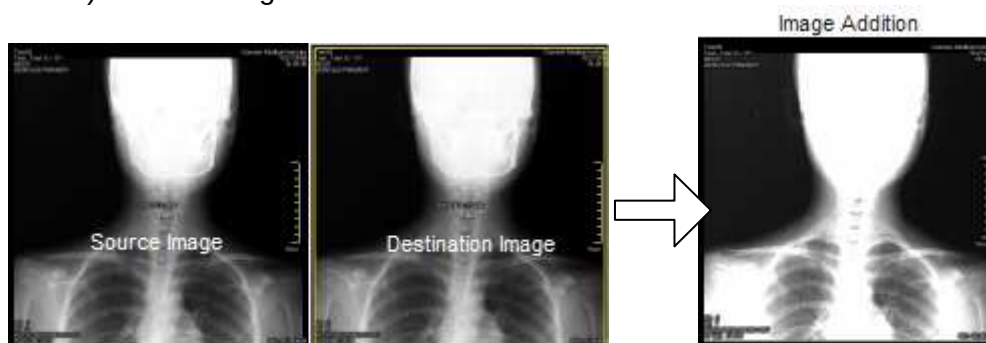
- 1) Open series from worklist
- 2) Change display setting to show all images in series
- 3) Go to **Tool**→**Select Source/Destination Image**
- 4) Select source image by clicking once on the image
- 5) Select destination image by clicking once on the image
- 6) Go to **Tool**→**Image Subtraction**
- 7) Subtracted image will be created



12. Image Addition

This feature adds the pixel values of 2 images of identical size to create a third image.

- 1) Open series from worklist
- 2) Change display setting to show all images in series
- 3) Go to **Tool**→**Select Source/Destination Image**
- 4) Select source image by clicking once on the image
- 5) Select destination image by clicking once on the image
- 6) Go to **Tool**→**Image Addition**
- 7) Added image will be created

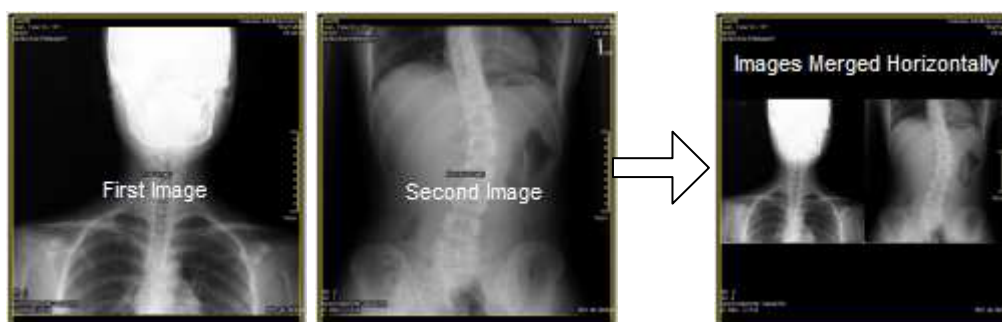


13. Select Images to Merge Horizontally

“Select Images to Merge Horizontally” is part of the merging images horizontally process. Refer to Merge Selected Images Horizontally below for complete process.

14. Merge Selected Images Horizontally

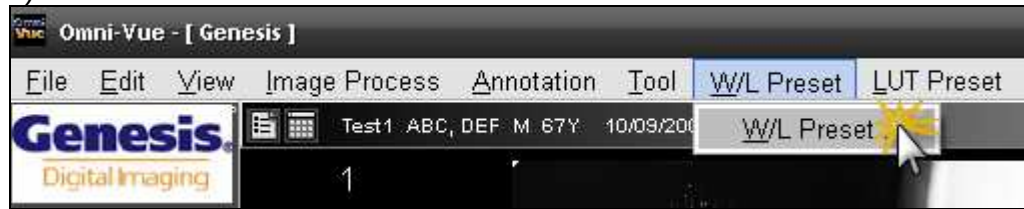
- 1) Open series from worklist
- 2) Change display setting to show all images in series
- 3) Go to **Tool**→**Select Images to Merge Horizontally**
- 4) Select first Image by clicking once on the image
- 5) Select second Image by clicking once on the image
- 6) Go to **Tool**→**Merge Selected Images Horizontally**
- 7) Selected images will be merged horizontally



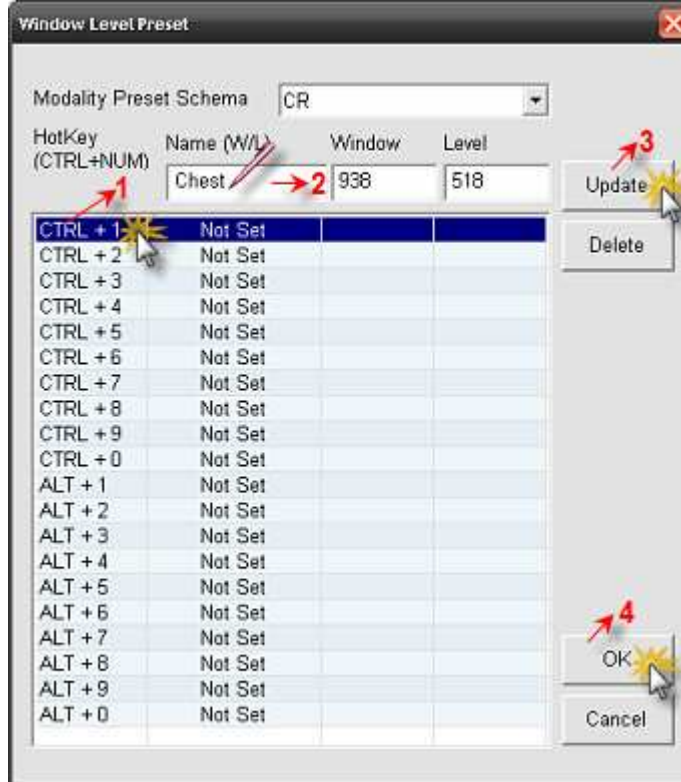
1.7 W/L Preset

Allows the user to adjust window level by using a pre-programmed short-cut key.

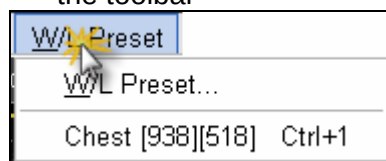
- 1) Go to **W/L Preset**→ **W/L Preset**



- 2) Modality and W/L value will have default inputs (These values can be changed manually)
- 3) Click one of the short-cut keys from the list
- 4) Type in W/L Name
- 5) Click **Update**
- 6) Click **OK** to register



- 7) To View the preset W/L's and the corresponding short-cut key, click **W/L Preset** from the toolbar

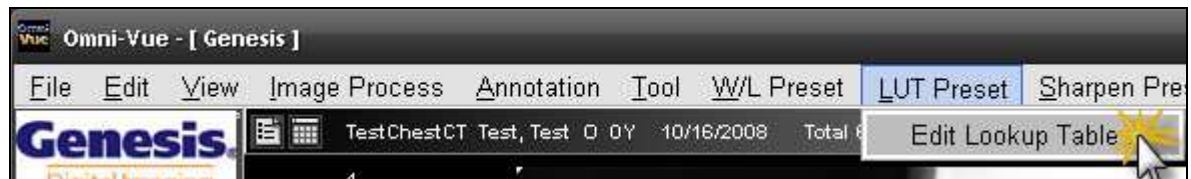


1.8 LUT Preset

This feature allows the user to expand the image's gray scale range by adjusting the non-linear curve. Adjust the window level value by right-clicking the image and adjust the curve to assign a more detailed value.

1. How to Adjust the LUT Graph

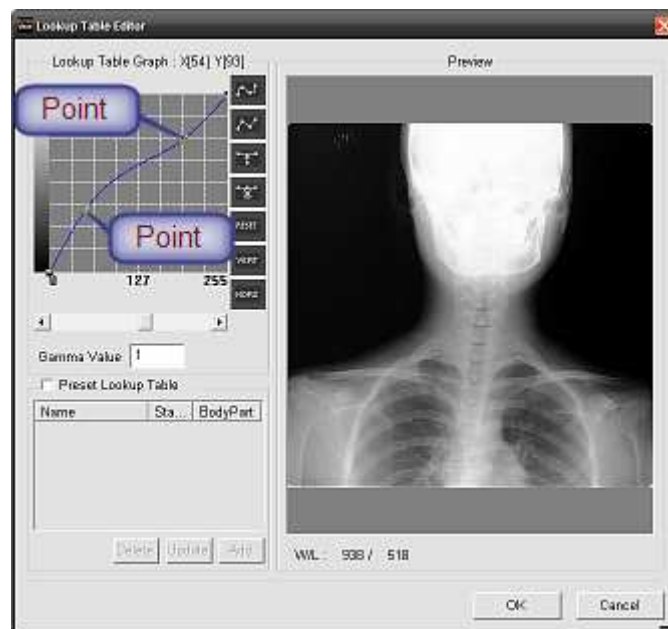
- 1) Go to **LUT Preset**→**Edit Lookup Table**



- 2) Follow one of the following 2 methods

Method I: Drag points

- o Drag on the line to be sigmoid curve and look at the image quality
- o Drop points if the quality of image is achieved



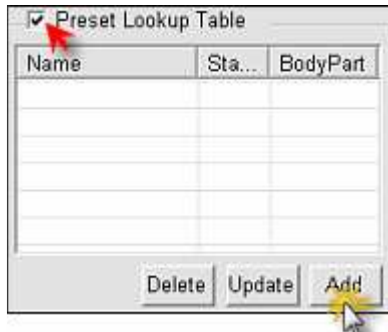
Method II: Drag Scroll Bar **OR** Enter Gamma Value



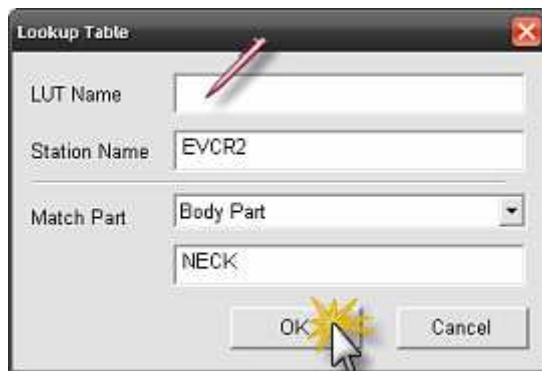
2. How to Preset Lookup Table

You can preset window level and Lookup Table values for each modality, body part, series or study for images to open with matching values.

- 1) Select Preset Lookup Table after image processing.
- 2) Click **Add**



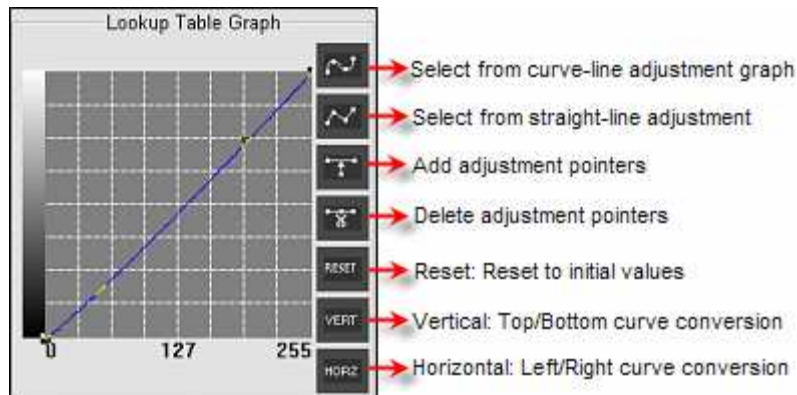
- 3) The station name and body part of the selected image are automatically registered.
- 4) Type in [LUT Name] and click OK. Station name and body part are registered with LUT value
- 5) Click **OK**



Note:

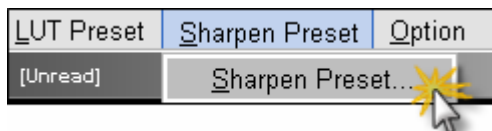
AUTOMATCHING priority is BODYPART→SERIES DESCRIPTION.

3. Lookup Table Tools

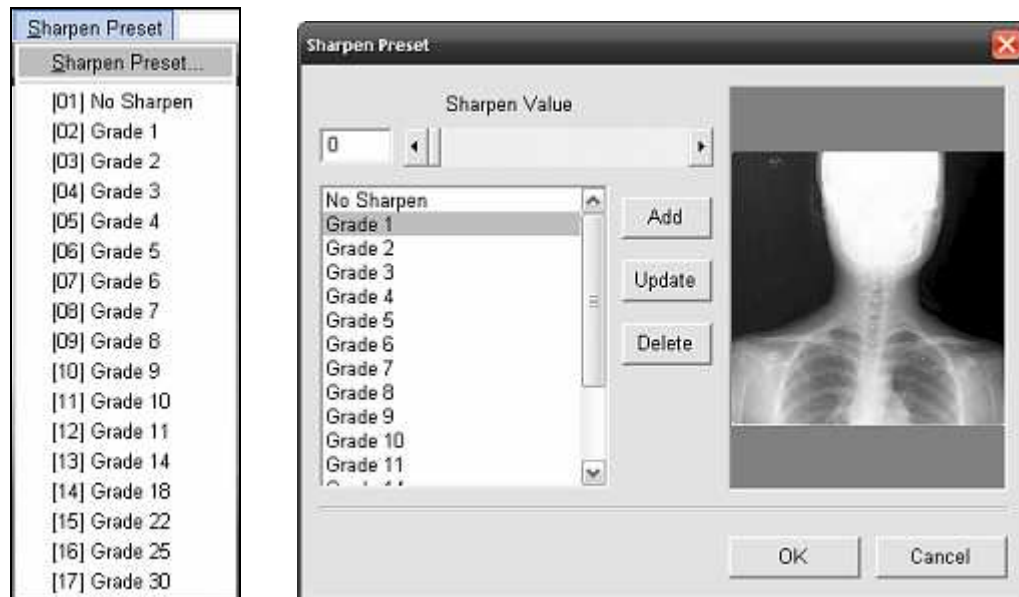


1.9 Sharpen Preset

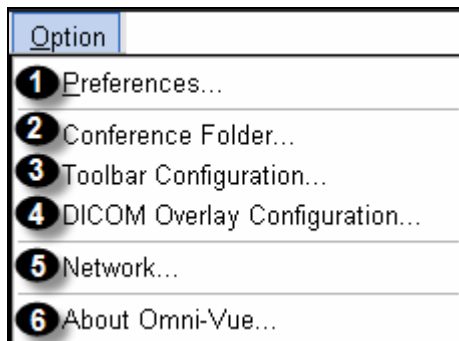
Sharpen value can be adjusted by presetting values. (17 basic presets)



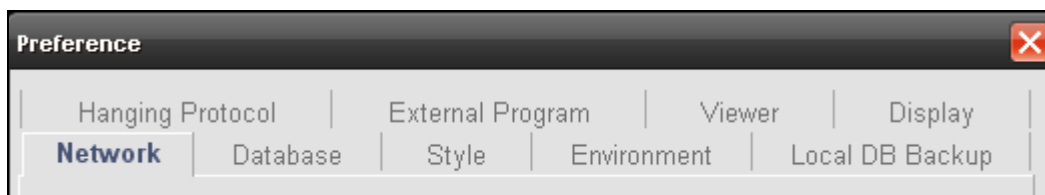
- 1) Click Sharpen Preset to see registered preset values
- 2) Click **Sharpen Preset** → **Sharpen Preset** to add, update or delete preset values



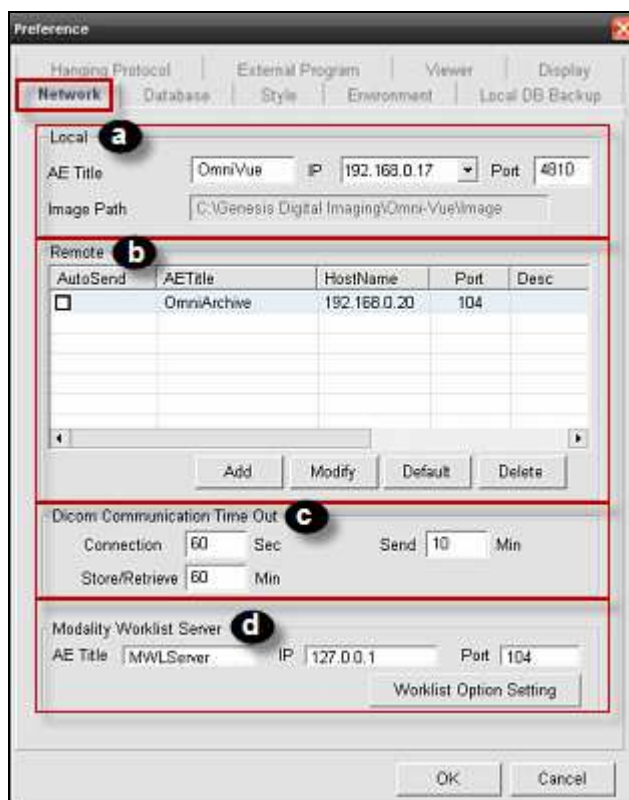
1.10 Option



1 Preferences

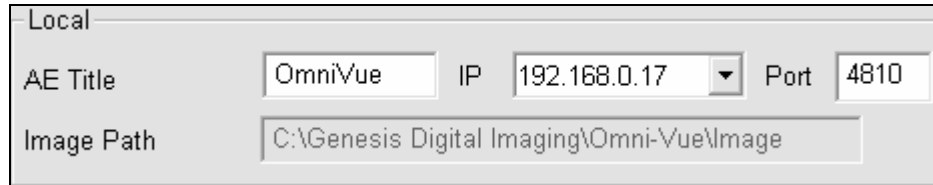


1.1 Network



a) Local

DICOM network information is auto generated in this section which displays the AE Title, IP Address (local IP) and Port number. Also contains the path to the Local Database where DICOM images are stored.



Local

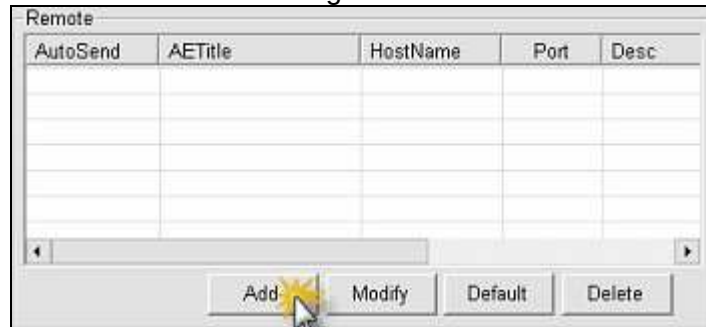
AE Title: OmniVue IP: 192.168.0.17 Port: 4810

Image Path: C:\Genesis Digital Imaging\Omni-Vue\Image

b) Remote

This section is used to register remote destination for sending DICOM images.

1. Click **ADD** to view registration window



Remote

AutoSend	AETitle	HostName	Port	Desc

Add Modify Default Delete

2. Type in [AE Title], [IP Address], [Port] of Remote Host
3. You may type in a "Description" or "Nick name" for easy identification
4. Click **Add**



Remote Network

AE Title: OmniArchive

IP Address: 999.99.9.9 Port: 9999

Description: Remote Destination 1

NickName:

Compression: Lossless JPEG

☒ Send Omni-Vue DICOM Private Tags

Add Cancel

c) DICOM Communication Time Out

DICOM Communication time-out information is auto generated.

Dicom Communication Time Out			
Connection	60	Sec	Send 10 Min
Store/Retrieve	60	Min	

d) Modality Worklist Server

This feature requires the presence of a MWL server. You may enter Modality Worklist Server information under this section if applicable.

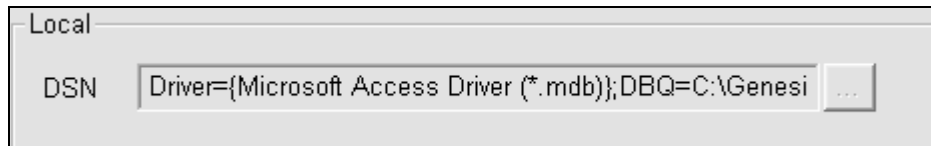
Modality Worklist Server			
AE Title	MWLServer	IP	127.0.0.1
		Port	104
Worklist Option Setting			

1.2 Database

The screenshot shows the 'Preference' dialog box with the 'Database' tab selected. The 'Local' section (a) displays the DSN path: 'Driver={Microsoft Access Driver (*.mdb)};DBQ=C:\Genesis'. The 'Remote' section (b) is a table with columns 'ServerName', 'DSN', and 'Description'. The 'Database Option' section (c) includes a checked checkbox 'Search all exam. for local database' and a 'Backup CD Driver' dropdown set to 'D:'.

a) Local

Displays path to the Local Database of OmniVue. (Omnivue.mdb) This path can not be modified.

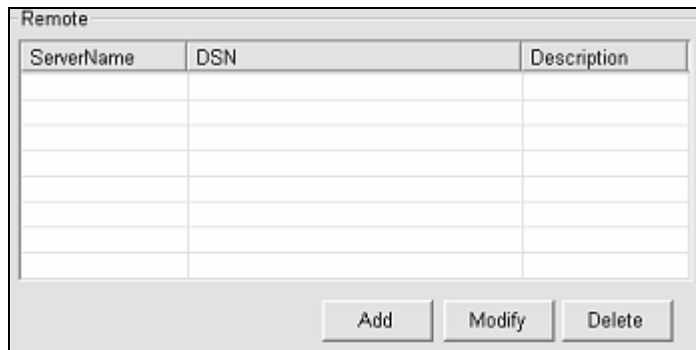


Local

DSN Driver={Microsoft Access Driver (*.mdb)};DBQ=C:\Genesi

b) Remote

Register OmniArchive or OmniOne Server to be added in worklist if applicable



Remote

ServerName	DSN	Description

Add Modify Delete

c) Database Option

Select check-box for “Search all Exams for local database”

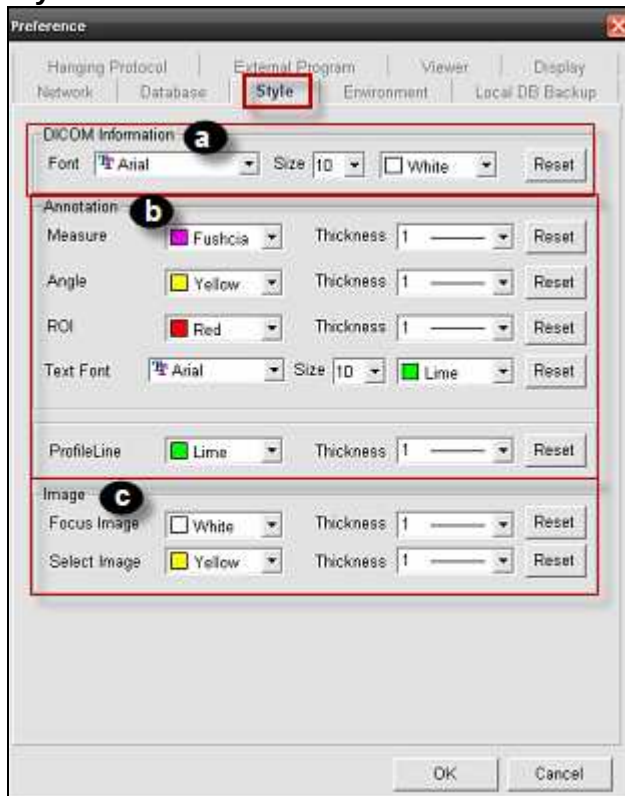


Database Option

☒ Search all exam. for local database

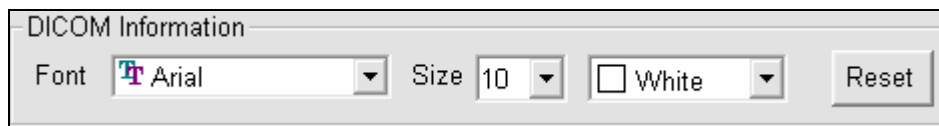
Backup CD Driver D: ▾

1.3 Style



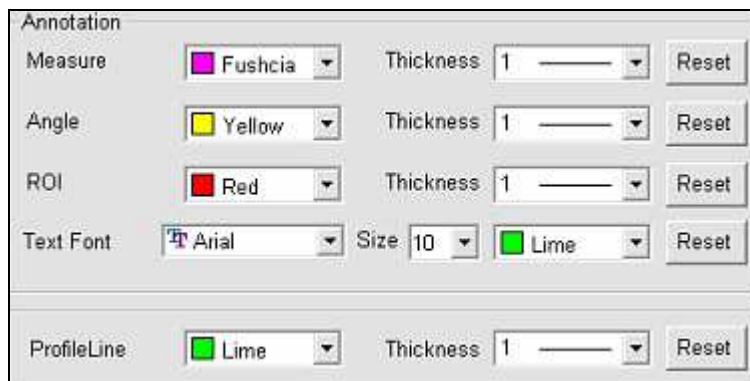
a) DICOM Information

This feature allows user to edit the default font settings for DICOM information displayed.



b) Annotation

This feature allows users to select a desired color, line thickness and font used for Annotations and Profile Line.



c) Image

This feature allows user to select a desired color and line thickness for Focus & Select images.

The dialog box titled "Image" contains two rows of settings. The first row is for "Focus Image" with a color dropdown set to "White" and a "Thickness" dropdown set to "1", followed by a "Reset" button. The second row is for "Select Image" with a color dropdown set to "Yellow" and a "Thickness" dropdown set to "1", followed by a "Reset" button.

1.4 Environment

The "Preference" dialog box has several tabs: Hanging Protocol, Network, Database, External Program, Style, Environment (selected), Viewer, Display, and Local DB Backup. The "Environment" tab contains the following settings:

- a) LUT Auto Matching:** Radio buttons for "Server" and "Local", and an "Update Local LUT" button.
- b) Cache Image Expire Duration:** A numeric spinner set to "2" followed by "Days".
- c) Worklist Refresh Interval:** Numeric spinners for "Min" (set to "0") and "Sec" (set to "0").
- d) Email Image Format:** Radio buttons for DICOM, JPEG (selected), BITMAP, TIFF, J2K, and PDF.
- e) Use Nero Burning ROM:** A checked checkbox with a warning message below it: "* WARNING - This function is allowed for users who purchased Nero burning rom 6 from Nero AG."
- f) Recheck dongle:** A button.
- Add Custom Tag:** A button.

a) LUT Auto matching

When an image is displayed, the LUT value will be applied your choice of the Server DB or Local DB base by checking the desired option under "LUT Auto Matching"

The dialog box titled "LUT Auto Matching" shows two radio buttons: "Server" and "Local". To the right is an "Update Local LUT" button.

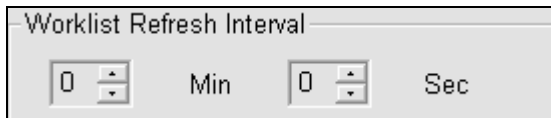
b) Cache Image Expire Duration

OmniVue stores images in a cache database whenever an image is opened. User is able set the number days before the cache is cleared.

The dialog box titled "Cache Image Expire Duration" features a numeric spinner set to "2" followed by the text "Days".

c) Worklist Refresh Interval

OmniVue will reconnect database and query the database to keep looking for new patient or exam within the configured time. User is able to set the interval time by entering the desired time values.



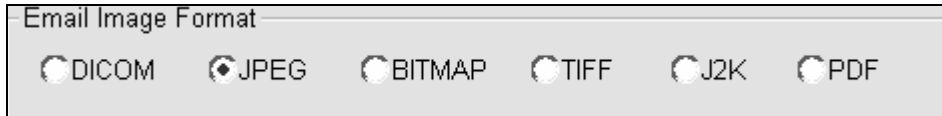
Worklist Refresh Interval

0 Min 0 Sec

d) Email Image Format

User may choose to set the default format of the attached image/s when sent via email.

[Refer to Page# 73 → Send to Email...](#)

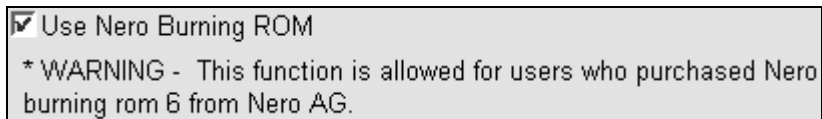


Email Image Format

☐ DICOM ☒ JPEG ☐ BITMAP ☐ TIFF ☐ J2K ☐ PDF

e) Use Nero Burning ROM

[Refer to Page# 55 → Archive/Backup to DVD/CD](#)



☒ Use Nero Burning ROM

* WARNING - This function is allowed for users who purchased Nero burning rom 6 from Nero AG.

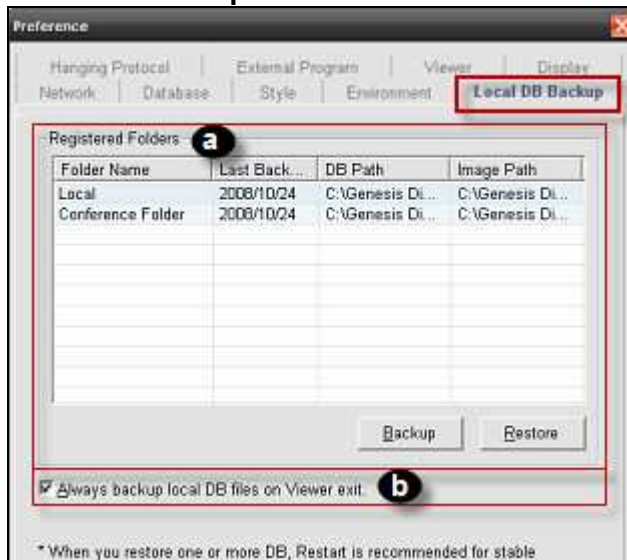
f) Recheck Dongle & Add Custom Tag buttons



Recheck dongle Add Custom Tag

- o **Recheck Dongle:** Each time the OmniVue Dongle is re-plugged into the workstation computer, click on Recheck dongle to refresh the license.
- o **Add Custom Tag:** This feature is available only with acquisition module.

1.5 Local DB Backup



a) Registered Folders

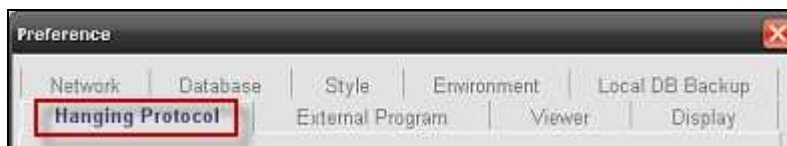
This section displays the Database and Image path created in the local system.

- o **Backup:** Backup current selected database on Registered Folders List.
- o **Restore:** Restore backup database into your local system.

b) Always backup local DB files on viewer exit

If this option is checked, OmniVue will backup local database each time user exits OmniVue software.

1.6 Hanging Protocol



- a) **Apply Server Layout:** Selecting this option uses default hanging protocols set by user.
- b) **All Series for 1 exam 1 series layout:** When selected, OmniVue will display images on all series mode.
- c) **All Series for CR, RF and XA Modality:** When selected, OmniVue will display images on all series mode for CR< RF and XA modalities
- d) **All Series for other Modality:** This option can be selected if all series mode has to be displayed for modalities other than CR, RF and XA.
- e) **All Series for 2 exams 1 series layout:**
 - **No:** OmniVue will not apply all series mode on any other layout condition.
 - **Both exams:** OmniVue will apply all series mode for each exam.
 - **Left exam:** OmniVue will apply all series mode to be located in left side of monitor.

- **Right exam:** OmniVue will apply all series mode to be located in right side of monitor.

Hanging protocol information

☒ Apply Server Layout

☒ All Series for 1 exam 1 series layout

☒ All Series for CR, RF and XA Modality

☐ All Series for other Modality

All Series for 2 exams 1 series layout

☒ No ☐ Both exam ☐ Left exam ☐ Right exam

f) Hanging protocol layouts

User can define series layout and image layout for each modality

1. Exam Layout

Default Layout **Exam Layout**

Modality	Exam Layout	Image(Row X Col)
AS	1 Series	1 X 1
BI	1 Series	1 X 1
CD	1 Series	
CF	1 Series	
CP	1 Series	
CR	1 Series	
CS	1 Series	
CT	1 Series	
EC	1 Series	1 X 1
EC	1 Series	1 X

Change Series Layout here

First select Modality and then select the Exam Layout and Image Layout below

Change image Layout here

Modality: XC Exam Layout: 1 Series Image(Rows X Cols): 1 X 1

☐ Same Bodypart Most recent Exams (Max 50)

1) Change Series Layout (Under Exam Layout)

In OmniVue, series layouts are defined as follows:

Exam Layout	
1 Series	→ Display only one series in the screen
2 Series	→ Display two series in the screen (1Row, 2Columns)
4 Series	→ Display four series in the screen (2Rows, 2Columns)
2 Exams	→ Display two exams in the screen (1Row, 2Columns)

2) Change Image Layout (Under Exam Layout)

After selecting series layout, user has to define image layout. When selecting 1 series in the series layout option, image layout will be fixed by default to 1x1.

Note:

CR: Choice of 1x1 to 2x2 layouts

MR & CT: Choice of 1x1 to 5x5 layouts

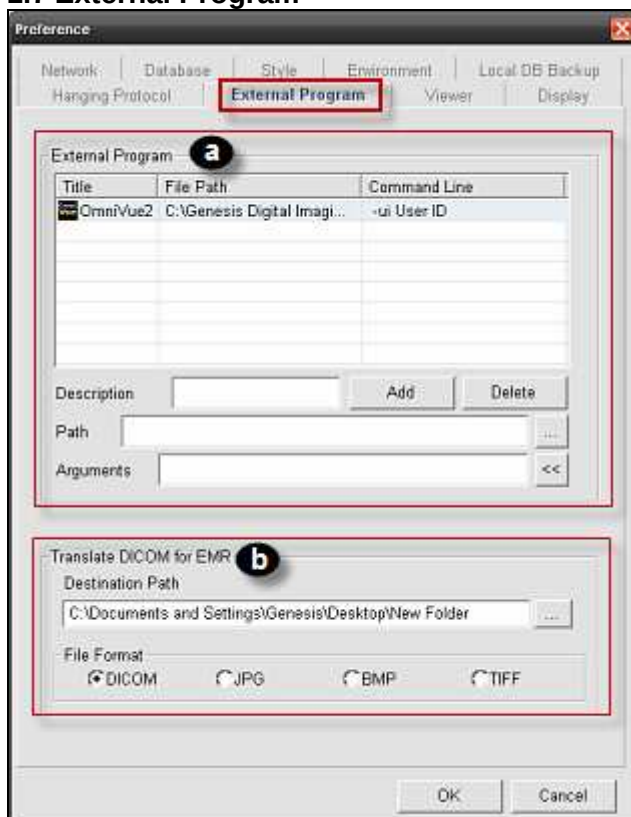
US & OT: Choice of 1x1 to 4x4 layouts

2. Default Image Layout

When selecting 1 series in series layout option, image layout option will be fixed default layout

Modality	Image(Row X Col)
AS	1 X 1
BI	1 X 1
CD	1 X 1
CF	1 X 1
CP	1 X 1
CR	1 X 1
CS	1 X 1
CT	3 X 3
DD	1 X 1
DF	1 X 1

1.7 External Program



a) External Program

Procedure to register an external program

- 1) Go to Option→Preference
- 2) Select External Program Tab

- 3) Input: Brief description of the program
- 4) Input the path: Click ... of path to register exe file of program

Title	File Path	Command Line

Description: OmniVue2 Add Delete

Path: C:\Genesis Digital Imaging\Omni-Vue\Omni-Vue.exe

Arguments: -ui User ID <<

- 5) Type an argument: Click << against the Argument field to register essential argument. (If no Argument exists then input directly).

Arguments: <<

Clear	→ Clear initialization of registered Argument
-ui User ID	→ OmniVue user ID call
-un User Name	→ OmniVue User Name call
-pi Patient ID	→ PID call of opened exam
-pn Patient Name	→ Patient name call of opened exam
-ps Patient Sex	→ Patient sex call of opened exam
-an Accession Number	→ Accession number call of opened exam
-sd Study Date	→ Study date call of opened exam
-mo Modality	→ Modality call of opened exam
-de Department	→ Department call of opened exam
-si Study Instance UID	→ Study instance UID call of opened exam
-bp Examined Body Part	→ Body part call of opened exam
-ie Userfile	→ Every image on opened exam will be provided as user file
-is Userfile	→ Every images on opened series will be provided as user file
-ii Userfile	→ Every images on opened selected image will be provided as user file
-ik Userfile	→ Every images on opened key images will be provided as user file

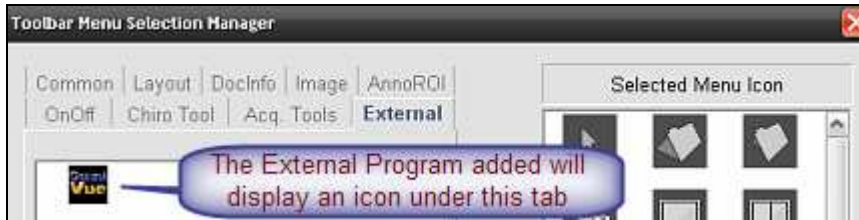
Note:

1. For the last 4 Userfile Arguments: Userfile name needs to be assigned directly
2. Contents of Userfile will be created at cache folder automatically when Omni-Vue external program is running.

- 6) Click **Add** to complete program registration
- 7) Click **OK** to finish the Preference Window
- 8) Restart OmniVue

External Program registration in Tool Bar

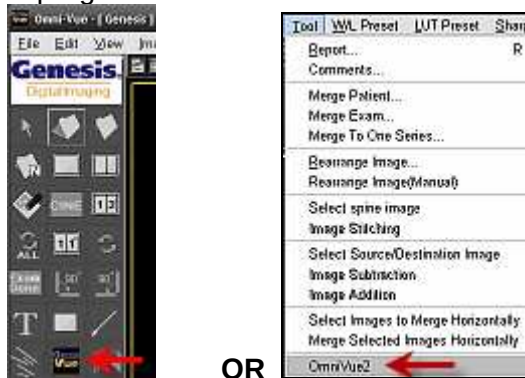
- 1) Go to Option→Preference
- 2) Click External tab in Toolbar Menu Selection Manager



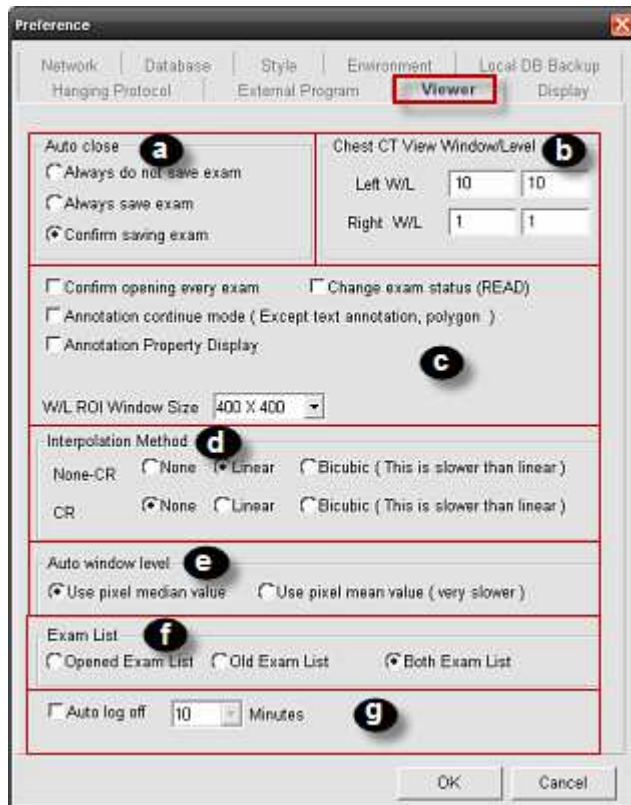
- 3) Drag & Drop registered program icon to the “Select Menu Icon” section
- 4) Click **OK**
- 5) Registered external program icon is displayed in the Tool bar section.

How to Use External Program

- 1) Open an exam and click the icon in the Tool Bar section **OR** click the registered program under Tool Menu



1.8 Viewer



a) Auto close

Refer to Page# 81 → Auto Close

b) Chest CT View Window/Level

Refer to Page# 83 → Chest CT View

c) Preset Options

- o **Confirm Opening every exam:** When selected, this feature prompts user prior to opening each exam
- o **Change Exam status (READ):** When selected, this feature will change the status of each accessed exam to READ
- o **Annotation continue mode:** When selected, this feature allows same annotation functions in current open series to be used in subsequent series
- o **Annotation Property Display:** When checked, this function allows same annotation functions in current open series to be used in subsequent series
- o **W/L ROI Window Size:** This feature allows user to set the size of preview window when Window Level is adjusting. Program must be restarted for the new setting to take effect.

d) Interpolation Method

To apply interpolation (anti-aliasing) functions to different modalities.

- o **None:** Does not apply interpolation on image.
- o **Linear:** Applies linear interpolation on image.
- o **Bi-Cubic:** Applies more linear interpolation on image.

e) Auto Window Level

Applies automatic window width/level using median value or mean value.

f) Exam List

Select one of the following options for the display under Exam List

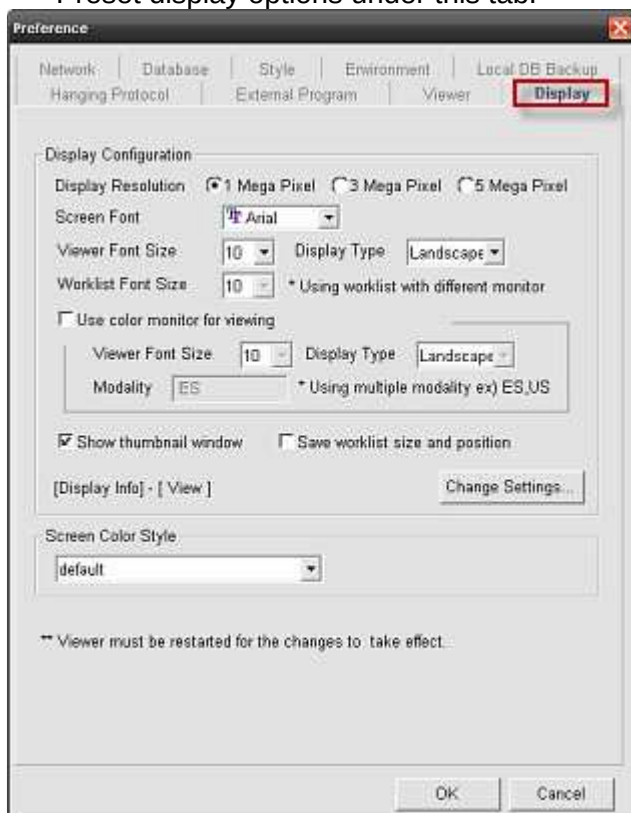
- o **Opened Exam List:** Displays only new exams
- o **Old Exam List:** Displays only old exams
- o **Both Exam List:** Displays both opened and old exams (default selection)

g) Auto log off

When selected, program will automatically log off after configured time.

1.9 Display

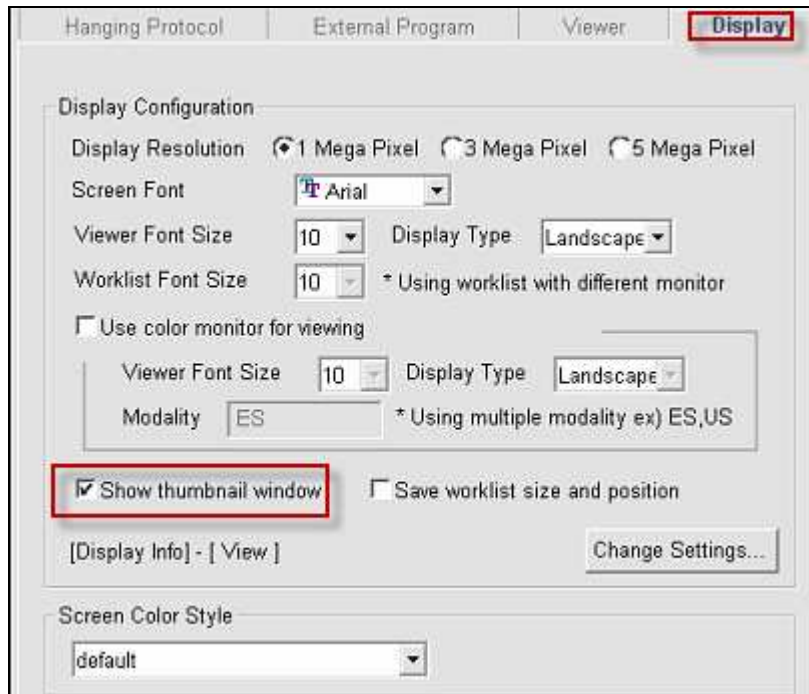
Preset display options under this tab.



Note: Thumbnail window is not configured by default. User may choose to configure thumbnail window.

How to Configure Thumbnail Window On/Off

- 1) Go to Option→Preference→Display
- 2) To display Thumbnail window, select Show Thumbnail window from Viewer tab



How to Hide/Show Thumbnail Window

- 1) Open exam from worklist window
- 2) Thumbnail image window is displayed when you move the cursor to the bottom of image display window and hides when you move the cursor away.
- 3) Thumbnail image window displays yellow opened mark on opened series or exams
- 4) Drag thumbnail image and drop into display window

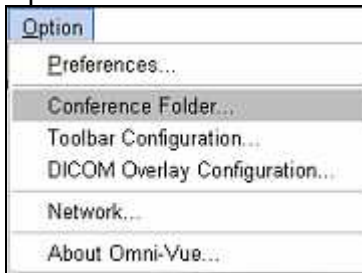
Note: Layout of Thumbnail Window may be modified by clicking on “<” or “>” button

Multi Monitor

This is an optional feature and requires special license dongle.

2 Conference Folder

Option→Conference Folder

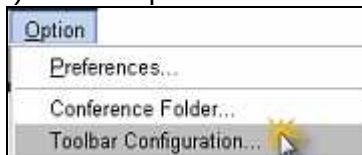


Refer to Page# 69 → Send to Folder...

3 Toolbar Configuration

To change the buttons shown in the toolbar

- 1) Go to Option→Toolbar Configuration



- 2) The window will appear as shown below.



- 3) To move an icon from the menu (Right) to the toolbar tabs (Left), either click and drag the icon, or select the icon and click the  button.
 - o To move a single icon back to the toolbar tabs (Right), select the icon and click the  button.
 - o To move all icons from the menu to the toolbar, click the  button.
 - o To return all icons to the menu, click the  button.
 - o To restore the Select Menu to its default settings, click the  button.

***Note:** Icons may seem to disappear after dragging from the right to the left. Each icon is saved under its appropriate tab. Check all tabs to locate the icon.

- 4) Click **OK** to save your settings.

4 DICOM Overlay Configuration

This feature allows user to customize the Overlay of the DICOM information on the Image.

Default Settings

- 1) Go to Option→DICOM Overlay Configuration

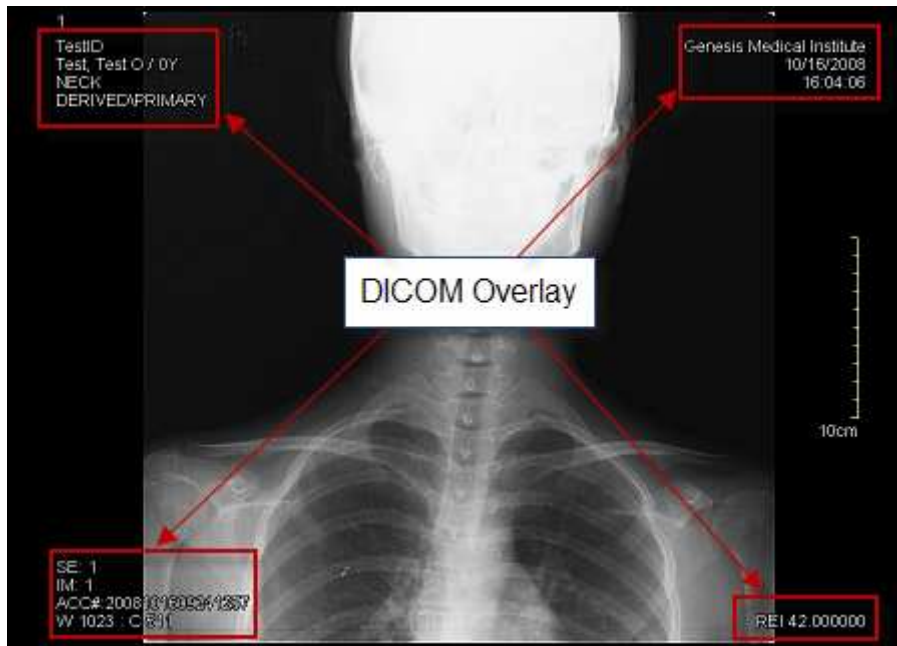


- 2) Select **Use Default**



- 3) Click **OK**

- 4) The Default DICOM overlay is displayed as follows:



Customize Settings

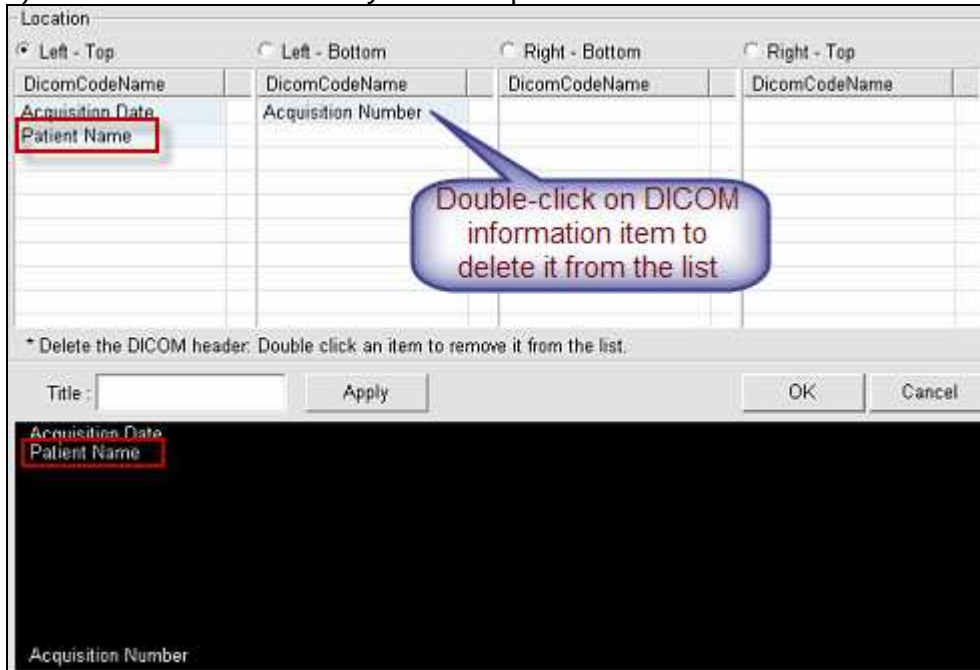
- 1) Go to Option→DICOM Overlay Configuration
- 2) Deselect "Use Default"
- 3) Select the position from one of four options displayed below

Location			
☒ Left - Top	☐ Left - Bottom	☐ Right - Bottom	☐ Right - Top
DicomCodeName	DicomCodeName	DicomCodeName	DicomCodeName
Acquisition Date	Acquisition Number		

- 4) Double-Click on the DICOM Information Item to be displayed

DICOM Information Item	Element	0010:0010
Operator's Name		
Overlay Position		
Patient Age		
Patient BirthDate		
Patient ID		
Patient Name		
Patient Position		
Patient Orientation		
	Patient's Name	
	Patient's full legal name	

5) View the DICOM Overlay on a sample screen at the bottom of the window

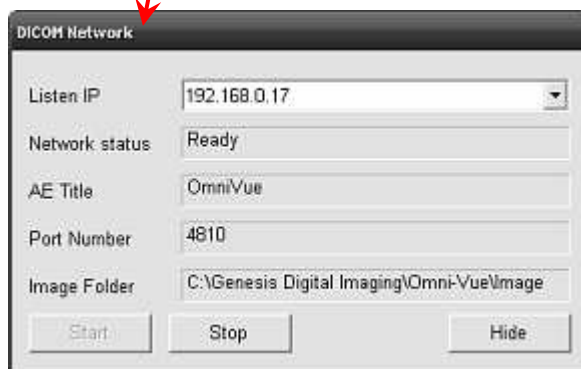
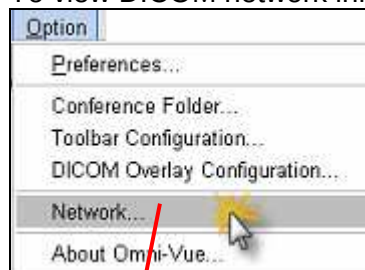


6) Click **OK** to apply settings

7) Refresh image to view changes

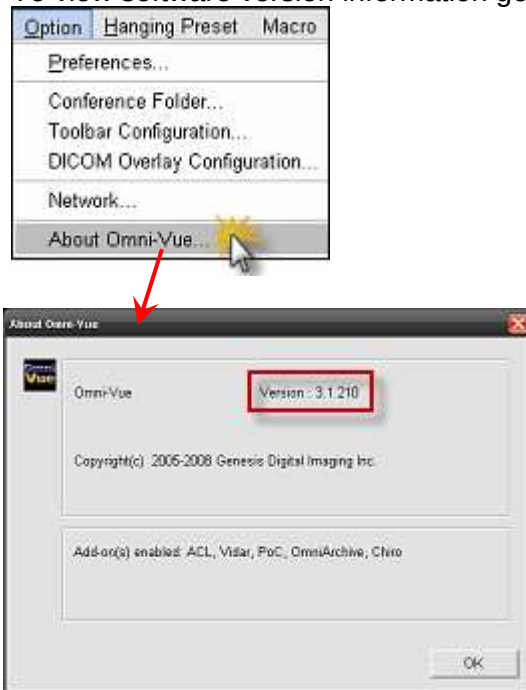
5 Network

To view DICOM network information, go to Option→Network Configuration

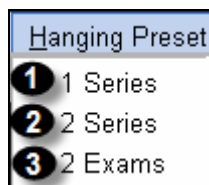


6 About OmniVue

To view software version information go to Option→About OmniVue



1.11 Hanging Preset



1. 1 Series



Display only one series on the screen.



2. 2 Series



Display two series on the screen. (1 Row, 2 Columns)



3. 2 Exams

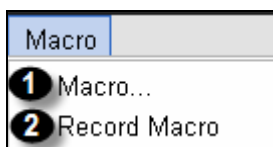


Displays two exams on one screen. (1 Row, 2 Columns)



1.12 Macro

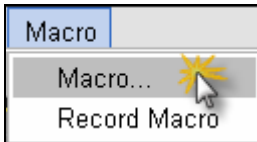
This feature allows user to pre-record a sequence of actions



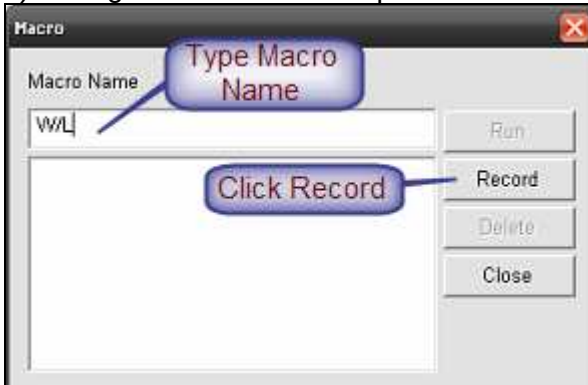
1. Macro

Example 1: Recording a single item - W/L

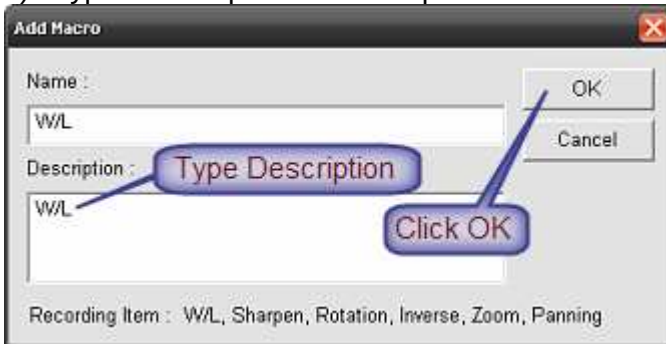
- 1) Open any Exam
- 2) Go to Macro→Macro



3) Assign a name to the sequence and click **Record**



4) Type a description of the sequence and click **OK** to start recording



5) The recording begins when a small recording window appears on the display window with STOP and PAUSE buttons



6) Click on the W/L icon



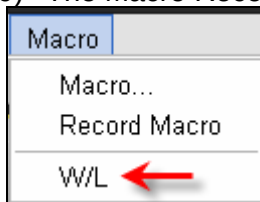
- 7) Adjust the Window Level of the Image as desired



- 8) Click the stop button



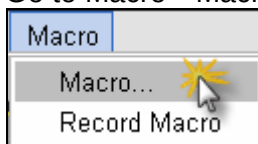
- 9) The Macro Recording appears on the Macro drop down menu



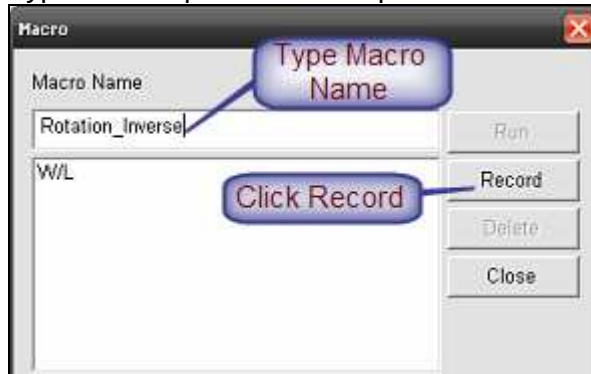
- 10) To view the same sequence of actions of the pre-recorded macro on another image open any other exam; go to Macro and click on W/L

Example 2: Recording multiple items – Rotation & Inverse

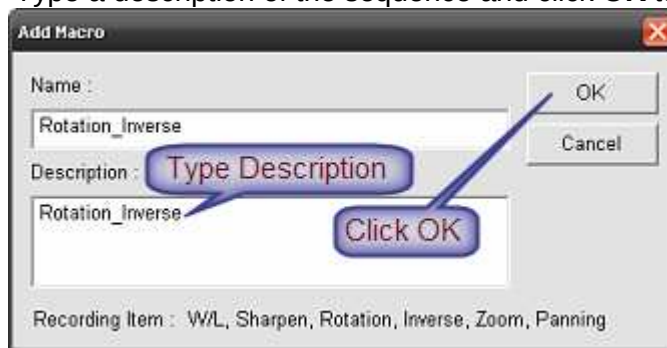
- 1) Open any Exam
- 2) Go to Macro→Macro



- 3) Type a description of the sequence and click **Record**



- 4) Type a description of the sequence and click **OK** to start recording



The recording begins when a small recording window appears on the display window with STOP and PAUSE buttons



- 5) Click on the Rotate CW icon



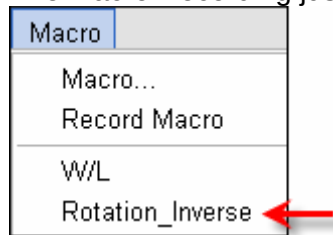
- 6) Click on the Inverse icon



- 7) Click the stop button



- 8) The Macro Recording just created appears on the Macro Drop down



- 9) To view the same sequence of actions of the pre-recorded macro on another image open any other exam; go to Macro→Rotation_Inverse

2. Record Macro

The Record Macro window is used just for Recording Macro's. The Macro Window displays the list of Macro's recorded. Recorded & saved macro's may be deleted by selecting and pressing the Delete button.

To use Record Macro option: following the steps 4 to 10 in the above examples.





Chapter

Trouble Shooting

- Slow Viewing
- Image Not Found
- Response Time
- Login Problems
- Local DB Backup
- Directory & Files

TROUBLE SHOOTING

Preference Setting

- 1) Click Option → Preference from top menu.
- 2) Set preference of network, database, style, environment, and viewer.

Image display

- 1) Rearrange the sequence of images on image display window.
- 2) How to configure multiple high-resolution grayscale monitors and a color monitor at once.
- 3) Detail information of scout view for CT and MR images.

1. Slow Viewing

- 1) Close all open images
- 2) Check Option → Preference → Viewer from the menu. And then select **None** for CR under Interpolation Method section.
- 3) Uninstall unnecessary programs
- 4) Check configurations such as interpolation, automatic cache clearance, etc.
- 5) Check for virus infection using anti-virus software.
- 6) Check hardware specification: Processor, memory and free disc space Consider upgrading
- 7) Perform ping test from OmniVue to OmniArchive to determine any network or server problems.
(Start → Run → type CMD → click enter → type "PING <IP Address of network or server>")
- 8) Check CPU rate and memory of OmniArchive. Compare the workload to system configuration.

2. Image Not Found

Exam on worklist does not show image (Image Not Found)



“Image Not Found” may be caused by:

- o The database capacity was exceeded during image transfer to the database.
- o Attempt to load the study before the image data had been transferred to the database.

Possible Solutions

- o Check space availability of your local storage.
- o Check FTP connection using DOS command.
- o Compare image-stored path in server's drive and path in database.

3. Response Time

- 1) Close all open images.
- 2) Check Option → Preference → Viewer. Select **None** for CR **under** Interpolation Method section.
- 3) Uninstall unnecessary programs
- 4) Check configurations such as interpolation, automatic cache clearance, etc.
- 5) Check for virus infection using anti-virus software.
- 6) Check hardware specification: Processor, memory and free disc space Consider upgrading
- 7) Perform ping test from OmniVue to OmniArchive to determine any network or server problems.
(Start → Run → type CMD → click enter → type “PING <IP Address of network or server>”)

4. Login Problems

Default User ID and Password = Genesis

4.1 Change Password

- 1) Click **Change PW** on the OmniVue login screen
- 2) Type old password
- 3) Type a new password
- 4) Click **OK**



4.2 Log-On failure

- o Wrong user ID/Password
- o Server connection error: In cases of server Database troubles, Network troubles, ODBC connection troubles
- o Local Database Error: In case of error on local DB of OmniVue
 - a. Click Cancel on error message.
 - b. Click OK.

4.3 Takes too long to login

- o If the initial screen does not appear for a long time after providing your ID and password, there is a problem with the link to the registered server, or the server does not exist on the network. Log on as a local user and go to Option → Preference. Delete the registered server from the database setting or adjust the link configuration.

5. Local DB backup

OmniVue has two local Databases (Master mdb and OmniVue mdb). Conference folders have their own specific mdb.

What is master mdb?

Master mdb contains the necessary information for OmniVue to operate. It has basic information for OmniVue Start and Logon Ex: Database, User and password, network, etc.

6. Directory and Files

1) Directory Info

OmniVue creates the following directories (database, image, banner, resource and style) at **C:\Genesis Digital Imaging\OmniVue**. These directories are prerequisite and shall not be deleted or renamed or modified. Multiple program files will be created as well as described below. Upon start of OmniVue for the first time, two additional directories (cache, backup db) will be created automatically. In the case of these two directories are deleted, OmniVue continues to work. However when you reuse cache or backup functions, an error can occur.

2) Database

Master.mdb

This file is necessary to operate OmniVue with basic information to run and log on. Database, User Name and Password, User level, Network and DICOM printer settings.

OmniVue.mdb

Local folder contains information of exam: Study, Series, Image information tables, etc.

3) Image

Image save directory of OmniVue.

4) Banner

Banner image such as facility logo can be inserted in OmniVue. To display banner, create an image in JPEG file format and insert in this folder. Name files as follows:

For display in Landscape format: *L_logo_banner.jpg*

For display in Portrait format: *P_logo_banner.jpg*

The logo banner is displayed in the upper left hand corner of screen when program is running.

5) Backup MDB

The directory in which OmniVue automatically stores the local database backup files (Master.mdb, OmniVue.mdb). Go to Option -> Preference Setting -> Local DB Backup to setup.

6) Important Files

[Note: These files are located at "C:\Genesis Digital Imaging\OmniVue"]

OmniVue.exe

OmniVue Program execution file

PPW RES.dll

DLL file contains resource files that are related with OmniVue interface.

SCNJDPrint.dll

File manages DICOM Printer function.

An error occurs if the version does not match.

OmniVue.ini

This file contains options and setting value.

Located at C:\Windows

Digital Imaging Simplified

www.genesisdigital.com
© 2008 Genesis Digital Imaging, Inc.